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FIELD MANUAL

MILITARY INTELLIGENCE BATTALION AERIAL RECONNAISSANCE SUPPORT

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No. 30-35

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 30 November 1971

**MILITARY INTELLIGENCE BATTALION,
AERIAL RECONNAISSANCE SUPPORT**

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CHAPTER 1

GENERAL

Section I. INTRODUCTION

1-1. Purpose

This manual provides *guidance* to commanders, staff officers, and military intelligence personnel on the operational and training techniques and procedures to be employed by the Military Intelligence Battalion, Aerial Reconnaissance Support (MIBARS).

1-2. Scope

a. This manual complements the doctrinal guidance of FM 30-20 with detailed procedural guidance on task performed by the MIBARS in the accomplishment of its mission. It also outlines the joint US Army-US Air Force system for fulfilling the requirement for aerial reconnaissance support, discusses the concept of employment of the MIBARS in conventional warfare and modifications thereto necessary in stability operations, and points out certain aspects of MIBARS training that will facilitate mission accomplishment.

b. Techniques developed to accomplish certain tasks in certain environments are discussed in chapters 5 and 6. Adherence to these techniques is not mandatory, and commanders should remain flexible and innovative.

c. The material herein is applicable to general war and limited war, in both nuclear and non-nuclear warfare environments, electronic warfare environments, and under conditions involving the use of chemical, biological, and radiological agents. Practices peculiar to stability operations are discussed in detail in chapter 6.

d. The material in this manual is in consonance with existing international agreements. Although the agreements themselves are not included, their doctrine and operational requirements are discussed. When different procedures are used by US Forces acting alone, these procedures are discussed.

e. Unless otherwise stated, all discussion pertaining to the duties, functions, and responsibilities

ties of the G2 or G2 Air applies equally to the S2 or S2 Air in organizations below division level.

f. Within this manual, aerial surveillance and aerial reconnaissance are not considered as mutually exclusive activities. When one term is used, it indicates which activity is principally concerned; the naming of one activity, however, should not be construed to exclude the other activity unless this is expressly stated. For purposes of this manual the terms are defined as follows:

(1) Aerial surveillance—the systematic observation from the air of surface areas by visual, electronic, photographic or other means for intelligence purposes.

(2) Aerial reconnaissance—a mission undertaken to obtain, by aerial observation or other airborne detection methods, information about the activities and resources of an enemy; or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

(3) Implicit in these definitions is the fact that aerial surveillance is an area oriented, systematic, repetitive activity. Aerial reconnaissance, other than that in support of mapping projects or geological surveys, is essentially designed to gather information concerning a specific target, route, coastline, etc., not necessarily requiring continuous coverage in support of a particular operation.

g. Users of this manual are encouraged to submit recommendations to improve its clarity, accuracy, or usefulness. Comments should be keyed to the specific page, paragraph, and line number of the text in which the change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be prepared using DA Form

2028 (Recommended Changes to Publications)
and forwarded direct to the Commanding Officer,

US Army Intelligence Center and School, ATTN:
ATSIT-DL, Fort Huachuca, Arizona 85613.

Section II. MIBARS CONCEPT

1-3. Responsibilities

a. Every commander is responsible for all activities undertaken by his command. In the intelligence field of activity, the commander relies upon his G2 to accomplish the necessary planning, coordination, production, and dissemination of intelligence.

b. Within the broad field of intelligence are numerous specialized activities, each in turn requiring planning, coordination, production, and dissemination efforts to accomplish the objectives of that particular activity. At higher level staffs, the G2 has designated assistants to exercise staff supervision over one or more of these specialized activities. The G2 Air is the assistant who performs this function in relation to the aerial surveillance/reconnaissance effort.

c. The actual planning, collection, processing, production, and dissemination of intelligence from airborne sensors is a joint effort involving both Army and Air Force elements. This joint effort must be completely integrated and coordinated to insure the maximum utilization of all available resources in the accomplishment of the collection requirements of both services. Generally speaking, Air Force tactical reconnaissance elements collect information and provide imagery in accordance with the plan prepared by the field army G2 Air.

d. The field army or independent corps G2 exercises staff supervision over the MIBARS through his G2 Air. Operational control of the MIBARS detachments is always retained by the MIBARS battalion commander. The MIBARS commander directs the production and dissemination of intelligence from imagery received from the Air Force, maintains liaison with supporting Air Force elements, and provides other support within his capabilities.

1-4. Imagery Intelligence

a. *General.* The intelligence cycle as applied to imagery obtained from airborne sensors consists of the usual processes of collection, processing, production, and dissemination. These steps are discussed in very general terms below, but chapter 5 details the procedures for accomplishing each portion of the cycle.

b. *Collection.* As mentioned above, information collection of concern to the MIBARS is accomplished by tactical air force (TAF) reconnaissance units. The primary collection means of importance to MIBARS are the various types of photography, side looking airborne radar (SLAR), and infrared sensors. The MIBARS also participates in the visual observation program by debriefing Air Force reconnaissance pilots and submitting reports of ground force sightings to the Army elements concerned.

c. *Processing.* The processing step includes film or imagery processing and several subsequent actions. The initial film processing is accomplished by the Air Force. Subsequent processing for intelligence, accomplished by the MIBARS upon receipt of the developed film, consists of careful interpretation of the imagery, the production of a duplicate negative when appropriate, and prints when specified by the requester.

d. *Production and Dissemination.* Production and dissemination of intelligence derived from airborne sensors employed by the TAF are almost exclusively the function of the MIBARS. With the exception of inflight reports, production is accomplished by various reports prepared after debriefing the flight crew and interpreting the imagery. Dissemination of the imagery and reports to the requester and interested agencies is accomplished by the MIBARS using its organic aircraft and organic or common-user communications.

CHAPTER 2

THE AERIAL SURVEILLANCE/RECONNAISSANCE SYSTEM

Section I. GENERAL

2-1. Purpose and Scope

a. This chapter explains the organization and operations of the joint US Army-US Air Force system for accomplishing aerial surveillance and reconnaissance support and lists the resources available for processing the generated imagery. A working knowledge of this concept is essential in order to employ the MIBARS in a manner that will maximize its capabilities.

b. This chapter also briefly explains the command and control organization established to enable the Air Force to effectively support Army tactical operations. The Air Force employs troop carrier aircraft for tactical airlift, and provides fire support and reconnaissance/surveillance through the employment of high performance tactical aircraft. This chapter deals with the latter and emphasizes the Air Force side of the organization.

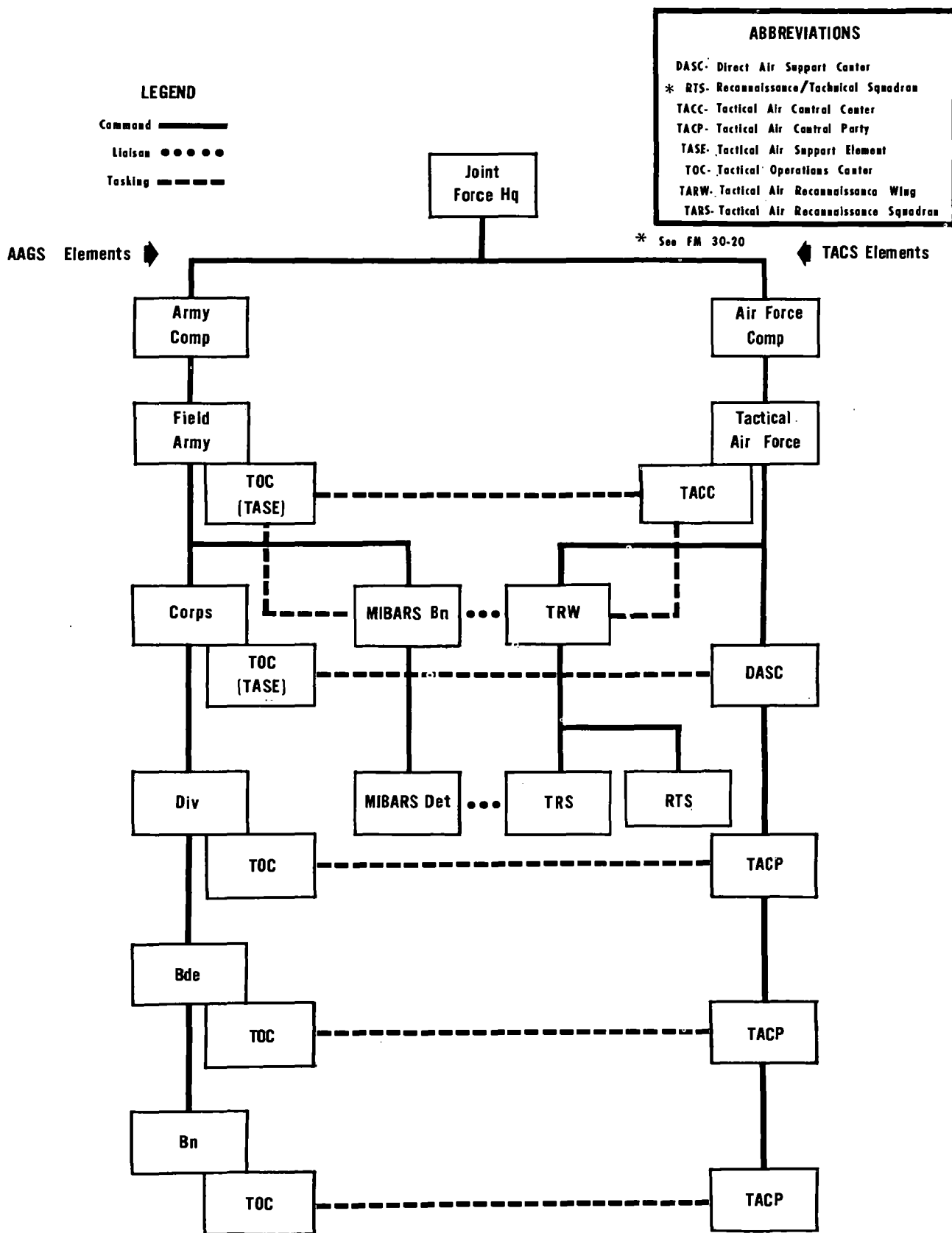
2-2. Organization—General

a. Aerial surveillance and reconnaissance missions are performed in support of the field army and its subordinate units by aviation units organic to the field army, the TAF, or other supporting Services. The TAF or air arm of other supporting Services provides a portion of the total aerial surveillance and reconnaissance effort required by the field army. When organic Army aviation can more effectively or more responsively meet the requester's needs, it should be used. As specific surveillance or reconnaissance requirements are developed at any echelon, they are either accomplished with the resources available to that echelon or are submitted to a higher headquarters for accomplishment.

b. The aerial surveillance/reconnaissance organization (fig. 2-1) is comprised of two parallel systems with agencies to coordinate and control tactical air support, Army aviation, the air arm of other Services, and ground operations. The Army employs the Army air-ground system (AAGS). The Air Force organization is called the tactical air control system (TACS). Each of these systems is adaptable to either large- or small-scale operations under varying conditions of warfare. They function together to control allocations of tactical air support missions; assign specific missions against these allocations; and plan, process, and execute these missions. The close coordination between these parallel systems also enhances the exchange of intelligence between Army and Air Force components.

c. The AAGS is organized with air-ground operations (G3/S3 Air) and intelligence (G2/S2 Air) personnel at principal Army commands, and Army operations and intelligence liaison personnel with Air Force installations or agencies. These personnel use communications facilities specifically designated for air-ground operations or, as an alternative, may use one of the common user or command operational nets.

d. TACS provides the Air Force component command (AFCC) with the organization and equipment necessary to plan, direct, and control tactical air operations in support of other military services. It is a highly flexible structure composed of various mobile control and communications elements. The principle of centralized control of air resources is the basis for organizing and operating the TACS. Its principal control element is the tactical air control center.



NOTE: The DASC and the TACP work with, are located with, and move with their counterpart Army operations centers

Figure 2-1. Organization for aerial surveillance/reconnaissance.

Section II. ORGANIZATION AND FUNCTIONS

2-3. Tactical Air Control Center (TACC)

a. The intelligence organization in the joint tactical environment must provide the information required for effective planning and execution of operations. It must be structured to suit existing conditions and the size of the force, and its intelligence staff should be tailored to meet the situation.

b. The TACC is charged with the preparation of the daily air operations combat plan, the publication of appropriate orders, and the determination of weapons requirements to support the plan. It coordinates, plans, monitors, and directs employment of the total tactical air effort. The principal tasks of the TACC are to:

- (1) Provide centralized direction of the Air Force effort.

- (2) Plan and monitor current tactical air operations.

- (3) Allocate air resources for air defense.

- (4) Direct air defense operations.

- (5) Allocate air resources to meet Army close air support and tactical air reconnaissance requirements.

- (6) Plan and direct air interdiction operations.

- (7) Plan and direct counterair operations.

- (8) Plan and commit preplanned close air support and reconnaissance missions based on allocation of air resources.

- (9) Initiate and receive tactical air operational reports.

c. The fundamental principle of TACC operations is the concept of centralized direction of the total tactical air effort with decentralized execution of scramble authority for air defense through the control and reporting center (CRC), decentralized coordination of tactical air support for the Army through the direct air support center (DASC), decentralized control of orders and plans through the tactical unit operations center, and decentralized control of tactical airlift at designated locations through airlift control elements (ALCE) and in some cases, combat control teams (CCT) in the absence of an established air traffic control facility.

2-4. Operations

a. *General.* The extent and variety of tactical maneuvers, both ground and air, emphasize the

need for forces possessing flexibility and mobility. Tactical airlift aircraft provide the commanders of all joint task force components with the capability of rapid deployment of men and material to exploit the principles of surprise and concentration of forces. The airlift capability is supported by tactical air reconnaissance and tactical fighter operations. Reconnaissance and fighter operations may also be requested and flown independently as required by the joint force commander. Requirements for aerial reconnaissance beyond the capabilities of the field army are passed to Air Force TACS elements for accomplishment.

b. *Requesting.* A request for aerial reconnaissance may be made at any level of command. However, the request must be forwarded through specified channels according to the type of request—preplanned or immediate. These channels are shown in figure 2-2 and explained below.

- (1) *Preplanned.* The preplanned request is forwarded through Army channels for approval of action by G2/S2 Air personnel at successive echelons of command. If the request has been approved up to the field army G2 Air without action, he then determines the priority of the request and sends it to the Air Force TACC for action.

- (2) *Immediate.* The immediate request is submitted directly to the organization's tactical air control party (TACP). If approved by the G2 Air at that echelon, the TACP then sends the request directly to DASC at corps for immediate action. The request is monitored at each intermediate TACP for G2/S2 Air approval or disapproval. If it is disapproved, the disapproving echelon will notify the DASC and the originating TACP. Normally the battalion is the lowest echelon supported by a TACP. Requests originating below this level are forwarded through command channels to the first higher headquarters that is supported by a TACP.

c. *Mission Accomplishment.* A selected Air Force reconnaissance unit, responding to orders issued by the TACC, will fly the mission. The procedures for requesting an Air Force reconnaissance mission are discussed in FM 30-20, and FM 100-26. Upon completion, the imagery obtained is given to the responsible MIBARS detachment for interpretation. A report is then rendered by the detachment and sent to the requester through Army channels.

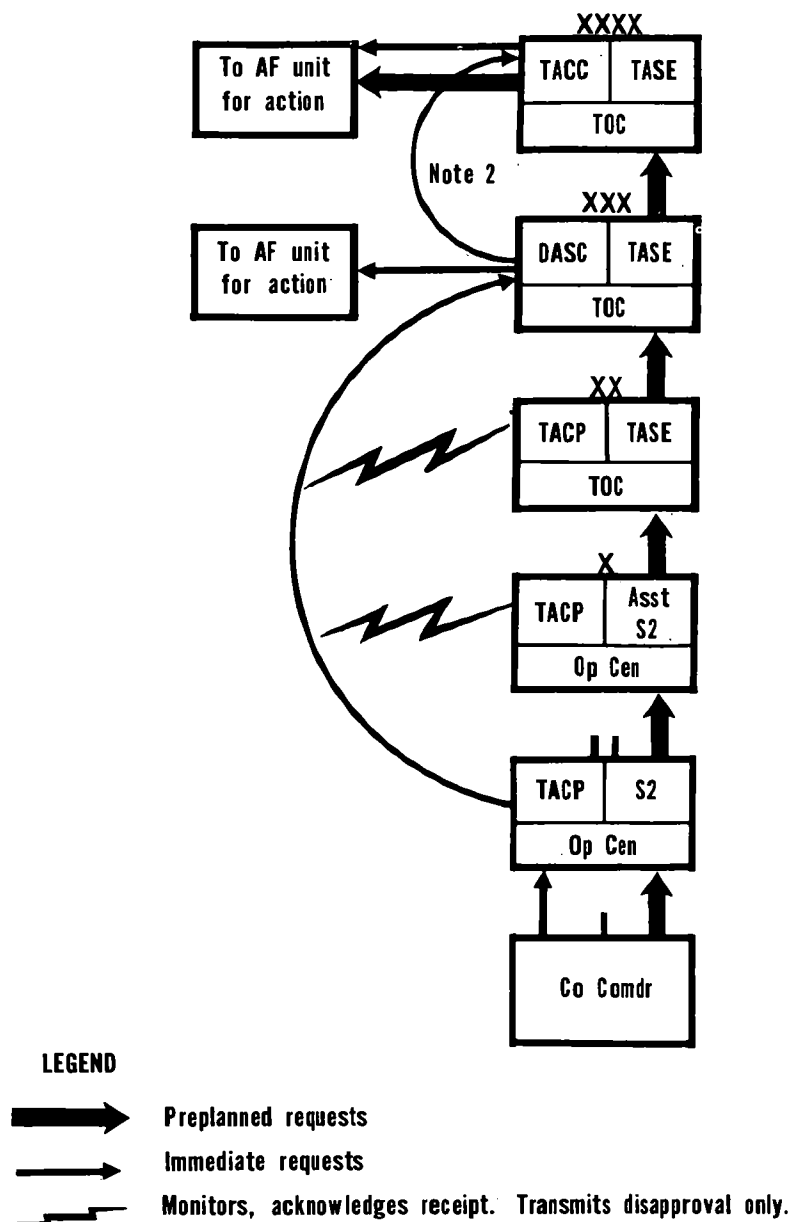


Figure 2-2. Air reconnaissance request channels.

Section III. AVAILABLE IMAGERY INTERPRETATION CAPABILITIES

2-5. General

The major product of the aerial surveillance-reconnaissance system is information to be used for intelligence. For this information to be put into usable form for the requester, it first must be interpreted by qualified military intelligence

image interpreters and subsequently evaluated by intelligence analysis. In addition to MIBARS, other imagery interpretation (II) capabilities available and the echelons they normally support are:

a. Military Intelligence Battalion, Field Army. In addition to the II support furnished by the

MIBARS, the military intelligence battalion, field army (TOE 30-25) has organic II personnel to provide II support to the field army G2 Air.

b. Field Army. At field army headquarters, an II team from the MI Bn field army headquarters and support section performs II to satisfy specific G2 field army requirements. This team is not designed to compete with or replace image interpreters of the MIBARS. The field army G2 Air usually supervises and directs the team. The primary mission of this unit is to support field army operational planning and targeting requirements and also for support of special operations of the MI battalion, field army.

c. Corps. At corps, II personnel are a part of the MI company (TOE 30-18H) coming from the MI battalion, field army. The II platoon of the MI company (corps) is employed in direct support of the corps headquarters and corps artillery and is the II capability for the corps aerial surveillance company. Ground sensor terminals (GST's) (FM 30-20) are organic to the MI

company for receipt of imagery in real time from Army surveillance aircraft.

d. Division. Each division has an II section, which is part of the MI company at division (TOE 30-17H). This section supports the division G2 Air. One of its major missions is the immediate interpretation of imagery received from the ground sensor terminals located within the division area. This section also assists in operational planning and targeting for divisional weapons systems.

e. Other Units. Other units having aerial surveillance or target acquisition capability are provided II support.

(1) Armored cavalry regiments and separate brigades are provided II support from their attached MI detachments (TOE 30-14).

(2) Missile commands contain organic image interpreters.

(3) The field artillery target acquisition battalion is provided II support from within the resources of the MI company at corps.



CHAPTER 3

MISSION, ORGANIZATION, AND FUNCTIONS

Section I. GENERAL

3-1. Introduction

This chapter gives the organization and functions of the MIBARS and its organic elements.

3-2. Mission

The overall mission of the MIBARS is to produce and disseminate intelligence information obtained or developed from tactical air force (TAF) reconnaissance elements operating in support of the field army and to provide liaison between field army and the reconnaissance elements of the supporting TAF. Mission of MIBARS elements are:

a. The Headquarters and Headquarters Company, MIBARS, provides command, control, administration, and logistical support for the battalion; performs detailed II for the field army; provides the means for immediate dissemination of information and imagery to the using units on a 24-hour basis; and provides liaison and coordination with the TAF reconnaissance units supporting the field army.

b. The Military Intelligence Detachment, Aerial Reconnaissance Support, interprets and reproduces aerial imagery obtained for the field army and supported units by the TAF and provides liaison between field army and TAF reconnaissance elements.

3-3. Organization

A MIBARS is organized under TOE 30-5 as depicted in figure 3-1. The Headquarters and Headquarters Company organization is shown in figure 3-2, and the organization of the military intelligence detachment in figure 3-3 (for unit strength figures see current letter series of TOE 30-5, 30-6, and 30-7). The unit staff of the MIBARS consists of the executive officer, S1, S2/S3, and S4.

3-4. Functions

a. *Battalion.*

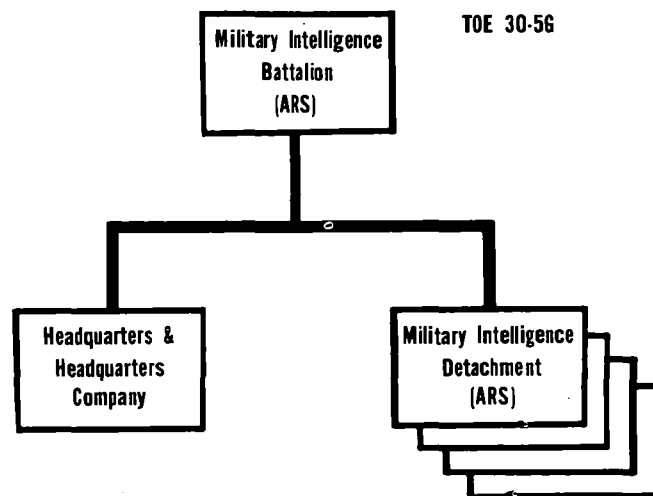


Figure 3-1. Military Intelligence Battalion, Aerial Reconnaissance Support.

(1) Processes, interprets, annotates, reproduces, and delivers imagery obtained from the TAF elements operating in support of the field army or independent corps.

(2) Coordinates II and reproduction functions from widely separated reconnaissance airfields and from the vicinity of the supported headquarters.

(3) Disseminates all intelligence information obtained through II and visual observation by aerial reconnaissance elements.

(4) Provides air reconnaissance liaison officers (ARLO) to TAF reconnaissance elements operating in support of the field army or independent corps.

(5) Briefs and debriefs Air Force reconnaissance pilots and observers.

(6) Provides MIBARS detachment to operate with dispersed elements of the TAF reconnaissance wing.

b. *Headquarters and Headquarters Company.*

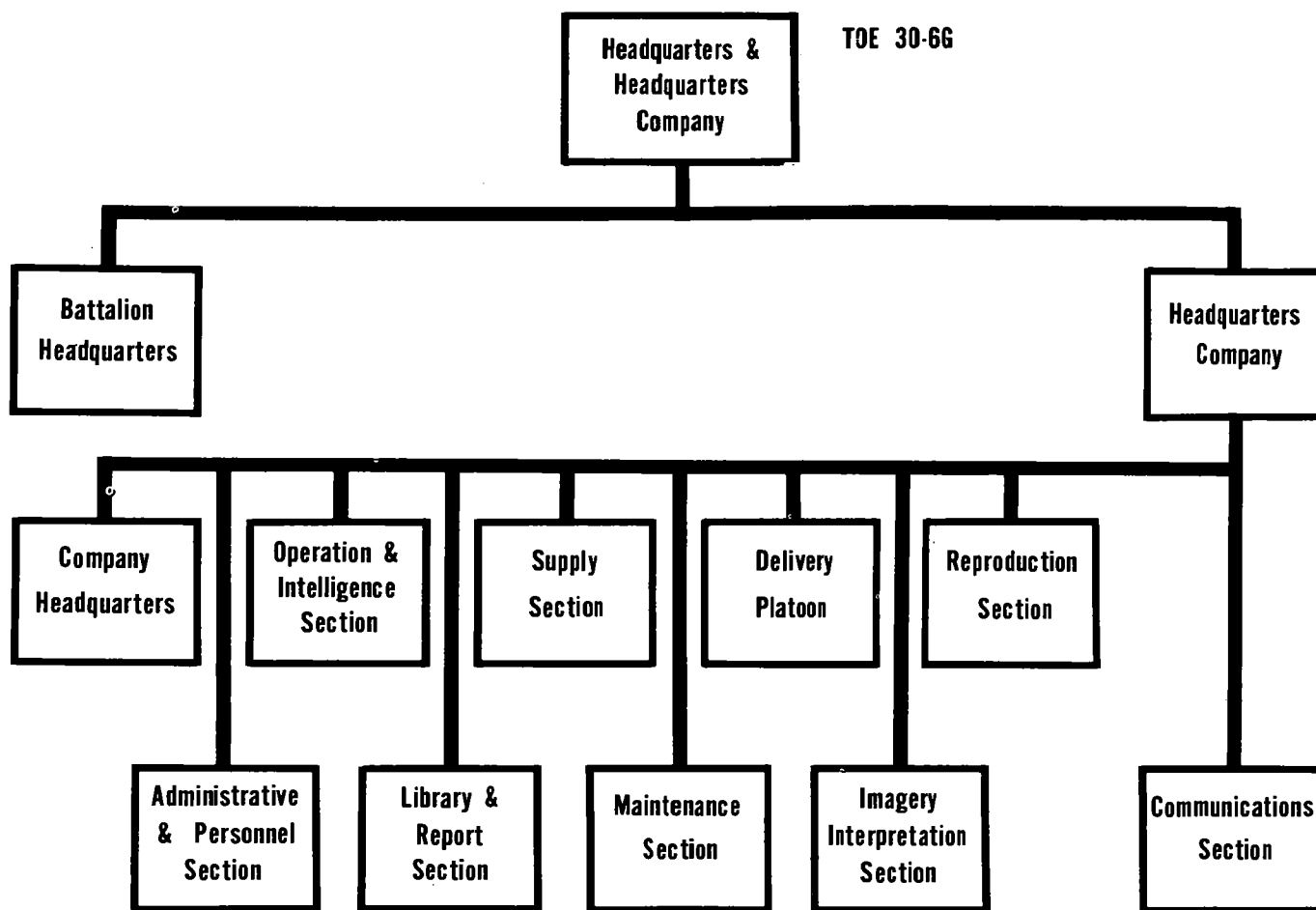


Figure 3-2. Headquarters and Headquarters Company Military Intelligence Battalion, Aerial Reconnaissance Support.

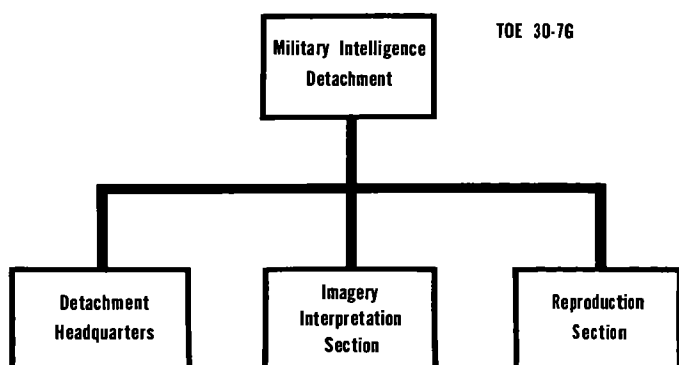


Figure 3-3. Military Intelligence Detachment, Aerial Reconnaissance Support.

(1) Provides command, control, and staff supervision for the battalion.

(2) Coordinates operations with the TAF

reconnaissance elements in support of the field army.

(3) Provides a senior ARLO to the major TAF reconnaissance unit.

(4) Provides administrative and logistical support for the battalion and detachments (with the exception of medical and religious facilities, which must be furnished by other units).

(5) Performs detailed interpretation of aerial imagery, as required.

(6) Reproduces, identifies, and packages aerial imagery.

(7) Delivers aerial imagery, as required, from each reconnaissance airfield to the field army headquarters and to each corps of the field army.

c. MIBARS Detachments.

(1) Plots mission coverage, performs II, and disseminates II reports on a 24-hour basis.

(2) Reproduces, identifies, and packages aerial imagery.

(3) Provides liaison to reconnaissance elements of the TAF.

(4) Briefs and debriefs Air Force reconnaissance pilots and observers.

Section II. UNIT AND SPECIAL STAFF

3-5. Introduction

This section provides information on the organization and responsibilities of the MIBARS unit and special staff and points out the peculiarities therein. Routine duties of unit and special staff officers are delineated in FM 101-5. Other duties associated with the intelligence activities of the MIBARS are described in this section.

3-6. Peculiarities of MIBARS Battalion Staff

a. The MIBARS S2 is also designated as the S3 operations officer.

b. The assistant S2 is also designated as an assistant S3 operations officer. He usually will perform duties with the operations and intelligence section.

c. The senior ARLO normally is located with the TAF reconnaissance wing headquarters.

3-7. Responsibilities

a. S1.

(1) The S1 has staff responsibility for personnel activities and other administrative matters not specifically assigned to another staff officer. The S1 is the battalion adjutant.

(2) The administration and personnel section under the direction of the S1 performs personnel administration for all members of the battalion.

b. S2/S3.

(1) The S2/S3 is responsible for the security of the battalion to include signal security (FM 32-5) and the functioning of the operations and intelligence section. In the routine pursuit of these duties the S2/S3 makes an important contribution toward the accomplishment of the MIBARS mission by maintaining close liaison and coordination with the commander, G2 and G2 Air of the supported command and the commander, operations officer, and intelligence officer of the supporting Air Force unit. The S2/S3 has an assistant to help him in the performance of his duties.

(2) The S2/S3 also has staff supervisory re-

sponsibility over the detachment activities. To effectively carry out this responsibility, the S2/S3 must be constantly aware of the mission requirements placed upon each detachment. These are normally prescribed in general terms in letters of instruction or orders and in specific terms by means of SOP and aerial reconnaissance and mission requests. The first two will be prepared and promulgated by the S2/S3 for the commander. The latter will be received by the detachment from the supported unit with copies furnished the battalion. The S2/S3 must then monitor the detachment's performance. This is accomplished by monitoring the detachment's reports for accuracy of interpretation and timeliness by visits and inspections, and by requiring the detachments to submit periodic statistical and operational reports. The S2/S3 is thus able to obtain an accurate picture of the effectiveness of each detachment, the relative workloads, and actual or impending problem areas. Based on this knowledge, the S2/S3 can make recommendations to the battalion commander concerning personnel or equipment changes, training requirements, policy changes, etc.

(3) To effectively coordinate the activities of the MIBARS the S2/S3 must also exercise direct staff supervision over certain headquarters elements that service the battalion as a whole—specifically, the delivery platoon, the communications section, the library and reports section, and the headquarters company reproduction and II sections. Although each of these elements has its own chief and will establish normal operating procedures to accomplish routine requirements, it is important that the battalion maintain flexibility in its functional organization so it can satisfy unusual requirements. This flexibility is achieved by placing these elements under the direct staff supervision of the S2/S3. He is thoroughly familiar with routine and special requirements and the status of all elements of the command, and can advise the commander if adjustments are necessary to accomplish the mission.

(4) The S2 functions of the operations and

intelligence section's activities are generally limited to counterintelligence matters. (Inasmuch as the MIBARS is an intelligence producing organization, the production of intelligence is an operational, or S3, function.) The security activities that must be performed include personnel, document, communications, and physical security measures designed to preclude the compromise of classified defense information. As it does for all Army organizations, AR 380-5 sets the basic standards. The S2/S3 must incorporate these standards into the MIBARS security SOP and insure that the standards are met. Among the specific activities necessary will be the establishment of a personnel security program involving the processing of requests for security clearances, the review and validation of existing security clearances, and the conduct of security education. Document security measures require the establishment of receipt, handling, storage, and disposition procedures for classified documents; periodic inventories; maintenance of classified document logs; and the education of all personnel who may be involved concerning the origination, marking, and transmission of classified reports and messages. Physical security responsibilities of the S2/S3 involve the security of classified information and documents. They may require the establishment of limited access areas and the development of access control procedures involving the use of badges, barriers, and guards. All security measures must be checked. This is accomplished by reviewing the SOP of subordinate elements and by periodic inspections.

(5) Occasionally, the routine activities of the S2/S3 may be augmented by special requirements of a one-time nature. Typical examples of such special requirements are the development of an in-country training program, materiel testing or development programs, and special photographic studies or reports. If the project is to be "farmed out" to one of the detachments, the S2/S3 is best able to determine which detachment should receive it, and he is the logical person to monitor the progress of the project. For those projects conducted at battalion headquarters, the S2/S3 again is the logical person to be responsible because he can coordinate the activity of various sections involved, and, subject to the concurrence of the commander, allocate the necessary resources. The S2/S3 can plan for these projects and effectively supervise them by designating his assistant as the special projects officer and routing all such requests to him.

c. S4. The S4 plans, coordinates, and executes logistical staff functions for the battalion.

d. *Senior Air Reconnaissance Liaison Officer.* The senior ARLO is considered a member of the commander's special staff. His duties, in addition to supervising the activities of detachment ARLO's, generally fall into three categories: liaison/coordination, briefing/debriefing, and record keeping/reporting.

(1) *Liaison/coordination.* The senior ARLO's liaison/coordination functions are similar to those of any liaison officer. He keeps his own commander advised concerning the status of the Air Force unit, and vice versa. As a school trained image interpreter, he can advise the Air Force concerning mission requirements. His coordination functions can include, but are not limited to, arranging for Air Force support of MIBARS personnel, arranging for visits of MIBARS and Air Force personnel to each other's installations, and making transportation arrangements for personnel or supplies. Also particularly important, primarily at the detachment level, is arranging for briefings with the Air Force and the Airspace Control Element (FM 101-5) concerning the supporting fires that might endanger aircrews performing reconnaissance missions. The senior ARLO provides information to the Air Force reconnaissance elements about the friendly ground situation to include frontline traces. Another function he performs is to report to the Air Force any outstanding successes achieved in ground operations resulting from Air Force reconnaissance missions. This will stimulate the interest of Air Force personnel in the joint effort, make them a party to the achievement, and enhance future cooperation.

(2) *Briefing/debriefing.* The senior ARLO's functions in the briefing/debriefing area can be divided into those involving aircrews and those involving commanders. The latter will probably predominate because it is unlikely that very many reconnaissance missions will originate at the field army level. If they do, the senior ARLO will be required to brief the aircrew before the mission and to debrief them afterwards. Because crew briefings and debriefings are a major function of the ARLO's at detachment level, the procedures will be included when discussing ARLO operations at that level. The senior ARLO can expect that much of his time will be spent in briefing the various commanders and staffs. The Air Force will be vitally interested in knowing the status of the ground war, enemy troop loca-

tions (particularly antiaircraft units), anticipated enemy activities, and planned friendly activities. The field commander is equally interested in the same type of information pertaining to the air war. To satisfy both parties, the senior ARLO must attend Air Force and Army intelligence briefings, visit operations centers, and maintain order of battle maps and status charts. This information is provided to the Air Force and Army elements as requested or as established in standard operating procedures.

(3) *Record keeping/reporting.* In addition to the records maintained to conduct his briefings, the senior ARLO (and the detachment ARLO's) must also keep records and submit reports pertaining to reconnaissance/surveillance requests. His status board (fig. 3-4) is vital for keeping track of each mission status and for coordinating artillery fire suspension (the mission status board is further explained in para 5-12). The mission report (fig. 3-5) submitted by him is normally the first report received by the requester. As an aid in conducting crew

briefings and debriefings, the ARLO will develop a checklist to insure completeness. There is no prescribed form, but suggested examples are shown in figures 3-6 and 3-7. When completed, the forms indicate that a thorough briefing/debriefing was conducted, and they also provide valuable premission briefing information if the same target is the subject of a subsequent mission. As a further aid in preparing for premission briefings, the ARLO should have a file of target cards or target folders covering any targets that are likely to be the subject of more than one mission. In addition to the target location and description, the card should include information concerning the coordination of artillery fire, known or suspected antiaircraft positions, and flight hazards in the area. Sources of information that will enable the ARLO to establish such a file over a period of time are postmission debriefings, interpretation reports from previous missions, other reports available at the battalion operations and intelligence section, and reports from the Air Force intelligence agencies.

MISSION STATUS

(Classification)

REQUEST NO	MISSION NO *	PRIORITY	TYPE MISSION	DATE NO LONGER OF VALUE	TOT	EST RTN	COMMUNICATION		IMAGERY REC'D	MISREP	TRANSMITTED			SUPIR	REPRO COMPLETE	DELIVERY COMPLETE	REMARKS
							CALL SIGN	FREQUENCY			HOT	PHOTO	REP				

(Classification)

* Indicates immediate mission

Figure 3-4. Mission status board.

(CLASSIFICATION)

USE STANDARD MESSAGE FORM HEADING	
FORMAT (NOT TO BE TRANSMITTED)	EXAMPLE MESSAGE
MISREP: ALWAYS START OF MESSAGE. AIR TASK/MISSION NO. A. LOCATION IDENTIFIER, SUCH AS: TARGET NO., COORDINATES B. TIME ON TARGET/TIME OF SIGHTING. C. RESULTS D. PHOTO CONFIRMATION E. OTHER INFORMATION	MISREP. 2/A55 A. LC 7253SS. B. 231150Z. C. BRIDGE OVER RIVER U/C D. YES. E. CONCENTRATED LIGHT ANTI-AIRCRAFT ARTILLERY AT TARGET, 8/8 CEILING 500 FT.

(CLASSIFICATION)

Figure 3-5. Mission report.

<u>BRIEFING GUIDE</u>	
SITUATION...	ENEMY FORCES FRIENDLY FORCES WEATHER
MISSION...	SUPPORTED UNIT FLYING ORGANIZATION
EXECUTION...	PLAN FOR FLIGHT SPECIFIC REQUIREMENT ARTILLERY FIRE COORDINATION
ADMINISTRATION AND LOGISTICS...	PETROLEUM, OILS, LUBRICANTS MAINTENANCE FACILITIES SPECIAL EQUIPMENT REQUIREMENTS
COMMAND...	CHAIN OF COMMAND AIRCRAFT CONTROL
SIGNAL...	SIGNAL OPERATION INSTRUCTIONS AIR GROUND SIGNALS

Figure 3-6. ARLO briefing guide.

DEBRIEFING CHECKLIST

DATE _____

MISSION NUMBER _____ PILOT _____ OBSERVER _____

ELEMENT DESIGNATION _____

TYPE OF MISSION _____

AIRCRAFT _____

TARGET DESCRIPTION _____

INFLIGHT REPORTS MADE _____

CONTACTS MADE DURING FLIGHT _____

ANY DEVIATIONS MADE FROM PLAN _____

SIGHTINGS	LOCATION	DESCRIPTION	TIME
INSTALLATIONS _____			
MOVEMENTS _____			
COMMUNICATIONS AND ELECTRONICS _____			

WEAPONS _____			
DEFENSES _____			
OBSTACLES _____			
MISCELLANEOUS _____			
DEBRIEFER'S NAME AND ORGANIZATION _____			

Figure 3-7. ARLO debriefing guide.



CHAPTER 4

MIBARS EMPLOYMENT AND PLANNING

Section I. EMPLOYMENT

4-1. General

The concept of employment of the MIBARS is discussed in FM 30-20. This section presents a brief summarization of this discussion to make subsequent chapters of this manual more understandable.

4-2. Battalion Employment

The responsibility for staff supervision of the MIBARS lies with the field army G2, who exercises this supervision through his G2 Air. The MIBARS commander retains command and operational control over the battalion. The headquarters and headquarters company, MIBARS, usually is located in the vicinity of the field army headquarters. The four military intelligence detachments are deployed with, and normally attached for rations and quarters to, TAF reconnaissance squadrons of the supporting reconnaissance wing.

4-3. Battalion Headquarters and Headquarters Company

The battalion headquarters and headquarters company is composed of elements that provide three separate functions—operations, administration, and logistics. In most instances the battalion headquarters and headquarters company will be located either in the vicinity of the field army airstrip, the field army main CP, or the field army tactical operations center (FATOC). The battalion commander operates from both the battalion headquarters and from the tactical air support element (TASE) of the FATOC. The operations and intelligence section is located with the battalion headquarters and acts as the focal point for all battalion operations. The II section, reproduction section, communications section, and library and reports section are under the direct staff supervision of the operations and in-

telligence section and generally will be located within the battalion headquarters complex. The delivery platoon, may be located in its entirety at the field army airstrip or it may be divided between several sites. The senior ARLO normally is located and operates with the Air Force reconnaissance wing supporting the field army.

4-4. Military Intelligence Detachment, Aerial Reconnaissance Support

The military intelligence detachments usually are deployed with the TAF reconnaissance squadrons supporting the corps of the field army. Working relationships and locations generally parallel those at the battalion-field army level. The detachment commander operates from the detachment headquarters, which is usually collocated with one of the Air Force tactical reconnaissance squadrons. The detachment ARLO operates with the supporting Air Force reconnaissance squadrons. The detachment II section will be located at the airfield utilized by the Air Force reconnaissance squadron. If elements of the delivery platoon are with the detachment, they will normally be located at the reconnaissance squadron airfield or the corps airstrip.

4-5. Other Considerations

Several factors will influence the MIBARS deployment. Most important is the deployment of the supporting Air Force reconnaissance units. This will dictate to a certain extent the MIBARS deployment, because imagery processing is expedited if the MIBARS elements can be collocated with them. The proximity of the field army or corps headquarters to its own airfield and to that of the Air Force must be considered also. Finally, inasmuch as the MIBARS detachments are not self-sufficient, they must be located where mess, quarters, and aircraft maintenance support can be provided.

Section II. PLANNING

4-6. Aerial Surveillance Collection Plan

There are two entirely separate aspects of planning of concern to the MIBARS. The first is the G2 Air collection plan, which is prepared by the G2 Air and is the basis for requests that the MIBARS must ultimately process. (An example of the G2 Air collection plan is illustrated in app C, FM 30-20). Close coordination should be maintained between the MIBARS and the G2 Air in the preparation of the aerial surveillance collection plan. As a party to the planning effort, the MIBARS representative can alert his unit as to what requirements are about to be levied upon it. This will enable the unit to make the logistical and personnel arrangements required to accomplish the mission.

4-7. Operational and Logistical Planning

The second aspect of planning of interest to the MIBARS is the operational and logistical planning required. For the MIBARS, particular attention is required in the following areas:

a. In a fluid situation it is probable that the Air Force reconnaissance squadron will occasionally move from one airfield to another so as to better support the joint force. If this occurs, the MIBARS detachment working with that squadron must also move if it is to continue to provide timely intelligence. To assure minimum disruption of support provided to the field army, the MIBARS move must be accomplished at the same time and as quickly as the Air Force move. This can be done only if detachment loading plans are kept up to date for unilateral as well as coordinated movement. In the case of coordinated movement, mobility plans devised for the detachments should be carefully coordinated by the battalion S2/S3 concerning possible conflict with Army contingency plans.

b. Time is of the utmost importance in the production and dissemination of imagery intelligence. For this reason the MIBARS has been provided with five organic aircraft to deliver reports and imagery to the requester. However, weather conditions or maintenance problems may preclude delivery by aircraft, in which case an alternate method of delivery must be found. The most desirable solution will vary from case to case, but the point is that the problem must be anticipated and appropriate plans made to overcome the difficulty.

c. There are other factors to consider when planning for the disposition of the aircraft. Should they be centralized under battalion control or divided among and stationed with the detachments? The former choice offers better control of aircraft and provides greater flexibility for response to unexpected or unusual demands, but the latter disposition will, in most cases, permit more rapid delivery to requesters. Certain factors, however, must be considered. The quality of maintenance facilities and personnel and the availability of spare parts at remote sites may well be the determining factors. The choice may depend upon the prevailing weather or the combat situation in different parts of the field army's area of responsibility. Quite often, a combination of the two methods of deployment may be necessary.

d. Planners must also determine the type of service to be provided by the delivery platoon. A courier system is generally the most efficient in terms of aircraft utilization but lacks the responsiveness necessary for timely completion of special missions. A special delivery mission for each requester, on the other hand, is the most rapid but results in inefficient aircraft utilization and is almost certainly beyond the capabilities of the delivery platoon. Both systems are subject to interruptions due to maintenance requirements. Again, the best system may be a combination of the two; that is, a courier for routine missions and a backup capability to handle special requirements. Planners must consider the current situation, and their final plan must permit a considerable amount of flexibility to cope with special requirements and changing situations.

e. Careful planning is also required to determine the best utilization of personnel of the reproduction section and the II section. Both sections must be geared to operate on a 24-hour basis, both must be able to react to sudden requirements, and both will be subjected to widely varying workloads during the course of a normal 24-hour period. Again the key to successful operations is to plan ahead and to retain a degree of flexibility by having a backup force available.

f. From the logistical point of view, critical areas which require thorough prior planning pertain primarily to the operation of the reproduction section. The section requires an unusually large amount of clean water, feasibly as much as

8,000 to 10,000 gallons within 24 hours during periods of peak activity. The water does not have to be distilled, but it must be carefully filtered; otherwise, deposits may be left on the prints that could lead to erroneous interpretation. Filtering is accomplished by the portable darkroom photographic facility (ES-38) which is organic to the reproduction section. Planners should insure that a sufficient supply of clean water is readily available and easily accessible. Another problem is that the chemicals used in the reproduction process, the photographic paper, and, to a lesser extent, the negatives are subject to serious deterioration due to aging or the effects of weather. For example, if photographic paper is stored at 90° F. in a humid atmosphere, approximately two thirds of the paper will be ruined within a day or two. For bulk storage purposes, each detachment is provided with a 12-ton trailer-van equipped with three 18,000 BTU air-conditioners. Headquarters company is provided with two of these storage vans. As a general guide, a 60-day supply of photographic paper should be kept on hand by the detachments.

g. The MIBARS is capable of performing limited organizational maintenance on all its organic equipment. Maintenance elements of the

battalion provide backup organizational maintenance support within their capability. The nearest area support group renders direct support to the detachment.

4-8. MIBARS Communications Capabilities

Communications play a vital role in the planning of MIBARS operations. Radio is the primary external means of communications for linking the battalion headquarters and detachments with field army and for disseminating mission reports. Communications capabilities include voice, continuous wave, and teletype provided by organic equipment of the detachments and battalion headquarters. The MIBARS has its own operations net which is discussed in FM 30-20 and 100-26. Alternate means of communication are the common-user nets and command/operations nets. The battalion headquarters also operates an internal telephone wire net utilizing organic equipment. Because of the wide dispersal required for individual MIBARS detachments, telephone communication between the detachments and battalion headquarters normally is not possible except through common communications service provided by the field army area communications system.



CHAPTER 5

OPERATIONS

Section I. GENERAL

5-1. Introduction

The preceding portion of this manual furnished *general guidance* to commanders of organizations supported by the MIBARS. This chapter and succeeding chapters provide *detailed guidance* for members of the MIBARS. The procedures described are those normally employed by the MIBARS when US Forces are acting unilaterally. When US Forces are acting in concert with forces of other friendly nations, certain variations from these procedures may be required to satisfy international agreements. These variations, as dictated by existing agreements, are discussed in chapter 7. The material herein will enable the MIBARS commander and staff to improve the efficiency of their operations and to achieve maximum results from the resources available to them.

5-2. Scope

This chapter details the operational techniques employed by the MIBARS in normal day-to-day activities. First, the sequence of events in fulfilling immediate and preplanned requests for aerial surveillance/reconnaissance is outlined, followed by a discussion of the operations performed and techniques employed by each organizational element. This portion deals only with those activities peculiar to the MIBARS; functions such as personnel administration, vehicular maintenance, and routine supply actions are not discussed.

5-3. Mission Request Sequence

a. General. The production of imagery is initiated by a request for aerial surveillance/reconnaissance from any level of command. After the request has been approved and scheduled to be flown by the Air Force, the MIBARS is notified. Upon completion of the flight, MIBARS personnel receive the imagery, interpret it, and render their report and/or imagery to the re-

quester through Army channels. The following discussion of the operational sequence will be in the same order; i.e., MIBARS operations when a request for information has been made, and their collection and dissemination of the information. In addition, the various records the MIBARS must establish and maintain will be mentioned. In considering this sequence of events, it should be remembered that:

(1) All phases of the sequence may be occurring simultaneously. At any given moment, some requests will have just been received, the ARLO's will be debriefing aircrews on other missions, image interpreters will still be working on recently collected imagery, and the delivery platoon will be carrying reports and imagery to requesters.

(2) The operational sequence involves two services, the Army and the Air Force.

b. Mission Requests. There are two types of aerial surveillance and reconnaissance mission requests—preplanned and immediate. The majority of requests are preplanned and are primarily surveillance-type (large area, continuous coverage) missions. Immediate requests are usually for reconnaissance of a particular target, involve a small area, and do not require continuous coverage.

(1) Preplanned requests.

(a) Preplanned requests are a product of the G2 Air's collection plan and represent the total known needs of the command as of the time of submission. At each level, when a request is initiated or received, it is entered in an aerial surveillance log (fig. 5-1). The G2 Air duty team chief integrates all requests from subordinate echelons approved by the G2 Air into the overall plan for his echelon. He then forwards a copy of the plan to the G2 Air at the next higher echelon. In formulating the collection plan, consideration is given to the availability and acceptability of prior imagery coverage and to the capabilities of

Figure 5-1. Type aerial surveillance log.

requirements for immediate requests. He then schedules the preplanned missions, according to their priority, against the allocation remaining. When agreement has been reached between the G2 Air and the TACC, the G2 Air notifies the subordinate corps as to the final scheduling of preplanned missions and allocates immediate missions to them.

(c) The TACC, upon tasking the reconnaissance wing which in turn tasks the subordinate squadron, informs the field army G2 Air as to the mission number, call signs, frequencies, and times for all missions scheduled to be flown by the Air Force. (For missions assigned to Army aircraft, the information is furnished the G2 Air by the flying unit.) This information is then passed to the requester and to the MIBARS. At this time the mission status boards or log sheets (fig. 3-4) at various echelons can be posted.

(2) Immediate requests.

(a) Immediate requests originating at the field army level are submitted directly to the G2 Air duty team in the FATOC. The team chief will:

1. Determine if the requested information is available (master cover trace) or duplicates any already scheduled mission (mission status board).

2. Determine if the mission can be performed by Army surveillance units.

3. Review the preplanned missions (mission status board) to see if a mission already airborne, or soon to become airborne can be diverted to accomplish the immediate mission.

4. Determine if the information desired can be obtained in time to be of value.

5. Establish mission priority.

6. If disapproving the request, notify the requester as to his action and the reason for disapproval.

7. If approving the request, pass the request to a subordinate G2 Air for accomplishment by Army aircraft or to the TACC for accomplishment by the Air Force.

8. Provide the MIBARS with the information, to include the requester's EEI, necessary to brief the aircrew.

9. Provide pertinent flight information to the MIBARS and the requester and post the mission on his mission status board.

(b) Immediate requests originating at corps are submitted to the corps G2 Air or to his representative in the corps TOC. They are processed

in the same manner as those originating at field army with the following exceptions:

1. Approved requests not within Army capabilities are submitted directly to the corps DASC rather than to the TACC.

2. Information required for briefing the aircrew and the requester's EEI are passed directly to the ARLO at the appropriate MIBARS detachment.

3. The field army G2 Air is given all pertinent information (flight data, EEI, etc.) on approved immediate requests.

(c) Below corps level, immediate requests are submitted directly to the unit's direct support TACP. Units with no TACP submit their requests through command channels to the first higher headquarters that is supported by a TACP. When they reach the TACP, the requests are transmitted over the Air Force request net directly to the DASC at corps level. Intermediate TACP's monitor this net, notify their G2 Air of each request, and signify approval by remaining silent. If, at any level, a G2 Air disapproves the request, he uses the Air Force air request net to notify the G2 Air at the initiating TACP level. At each echelon, the G2 Air bases his decision to approve or disapprove upon the same factors mentioned in the discussion of immediate requests originating at field army level. Approved requests will be forwarded by the DASC to an Air Force reconnaissance squadron for implementation, and the flight information will be given to the appropriate MIBARS detachment and to the field army G2 Air.

Section II. INITIATION OF MIBARS ACTIONS

5-4. Receipt of Aerial Reconnaissance Request

a. *General.* MIBARS operations are initiated when an aerial reconnaissance requirement, in the form of a copy of an air reconnaissance request (fig. 5-2 and 5-3), is forwarded to the MIBARS from the approving level G2 Air. On immediate requests the complete flying data (mission number, frequencies, date and time, etc.) may not be included because the information may not be known when the Air Force accepts the mission. On preplanned requests the flight data normally is included and serves to alert the MIBARS as to when to expect the imagery.

b. *Sequence of events.* Upon receipt of either type of request, the following events take place:

- (1) The duty team at applicable headquarters makes the appropriate entries on its mission status board.

- (2) The battalion operations and intelligence section confirms the request with the appropriate MIBARS detachment and at the same time alerts the delivery platoon so that proper flight planning can be accomplished. (This is particularly important for immediate requests.)

- (3) At the MIBARS detachment, the commander and his ARLO initiate planning for the impending mission. The ARLO then posts his own mission status board.

- (4) The ARLO prepares his briefing notes, coordinates with the reconnaissance squadron concerning a briefing time, and briefs the crew scheduled to fly the mission.

FROM	TO	IMMED	PR PLAN	AIR RECONNAISSANCE REQUEST
SECTION I				
L. ORIGINATORS REQUEST NUMBER _____ M. TYPE OF RECONNAISSANCE _____ N. NATIONAL MAP SERIES AND SHEET NUMBER _____ O. DESCRIPTION OF TARGET AND LOCATION _____ _____ _____ _____ _____ _____ P. OBJECTS OF REQUEST AND RESULTS DESIRED _____ _____ _____ _____ _____ _____ Q. PHOTO SCALE OR LIMITS ACCEPTABLE _____ R. NUMBER OF PRINTS, PLOTS OR REPORTS REQUIRED _____ _____ S. DELIVERY ADDRESS _____ _____ DATE _____ TIME _____ T. LATEST ACCEPTABLE _____ DATE _____ TIME _____ U. SPECIAL INSTRUCTIONS _____ _____ _____ _____ _____ _____ 				
NAME/RANK/POSITION OF REQUESTER			NAME/RANK/POSITION OF APPROVING OFFICER	
SECTION II - ARMY ACTION				
1. RECEIVED AT		2. BY		3. COORDINATED: ARTY: AIR DEF: AVN
DTG _____		LOCATION CHECKED		DTG _____
4. ☐ APPROVED ☐ DISAPPROVED		5. REASON FOR DISAPPROVAL		
6. FORWARD TO		7. REQUESTING UNIT NOTIFIED		8. MIBN (ARS) NOTIFIED
BY		DTG _____		DTG _____
DTG _____				
SECTION III - AF ACTION				
1. RECEIVED AT		2. BY		LOCATION CHECKED
DTG _____		DTG _____		DTG _____
3. ☐ APPROVED ☐ DISAPPROVED		4. REASON FOR DISAPPROVAL		
5. FORWARD TO		6. RETURNED TO ARMY		BY
BY		DTG _____		
DTG _____				
SECTION IV - AIR MISSION DATA				
1. MISSION NR.		2. ACCOMPLISHING ORGANIZATION		NOTIFIED
ARMY MISSION REQ NR		DTG _____		DTG _____
3. UNIT CALL SIGN		4. NUMBER AND TYPE AIRCRAFT		PRIORITY
5. TOT		6. CONTROL INFORMATION		
7. ARMY MISSION DATA		8. CRC NOTIFIED		DASC/TACC NOTIFIED
		DTG _____		DTG _____
9. OTHER COORDINATION				

Figure 5-2. Air reconnaissance request form.

EXPLANATORY NOTES**SECTION I.** TO BE USED BY ANY ARMY/AIR FORCE UNIT REQUESTING AIR RECONNAISSANCE.

- L. **ORIGINATOR'S REQUEST NUMBER:** EACH REQUEST WILL BE GIVEN A 3 PART REQUEST NUMBER. THE PREFIX WILL BE THE NUMERICAL OR LETTER DESIGNATION OF THE REQUESTER. SECOND PART IS THE RECONNAISSANCE REQUEST NUMBER OF THE DAY STARTING WITH 1 AND INCREASING CONSECUTIVELY THROUGHOUT THE DAY. THE SUFFIX WILL BE THE DATE THE MISSION IS TO BE PERFORMED, THE DATE THE MISSION IS FLOWN, EXAMPLE: 45-3-10 THE 5RD RECCE REQUEST BY THE 45TH INFANTRY DIVISION OF THE 10TH OF THE MONTH.
- M. **TYPE OF RECONNAISSANCE:** FOR EXAMPLE: VISUAL, ELECTRONIC, WEATHER, FIRE CONTROL OR PHOTOGRAPHIC RECONNAISSANCE (VERTICAL, OBLIQUE, IR, SLAR OR REPRINT PHOTOGRAPHY). THIS PARAGRAPH SHOULD BE LEFT BLANK UNLESS IT IS UNDERSTOOD FULLY WHAT THE SELECTED TYPE OF RECONNAISSANCE CAN ACCOMPLISH.
- N. **NATIONAL MAP SERIES AND SHEET NUMBER:** OWING TO THE LARGE VARIETY OF MAPS USED, BOTH IN TRAINING AND OPERATION BY NATIONS, THESE DETAILS MUST BE GIVEN IN FULL.
- O. **DESCRIPTION OF TARGET AND LOCATION:** TO INSURE THAT THE RECIPIENT OF THE REQUEST UNDERSTANDS THE REQUIREMENTS, IT IS NECESSARY TO GIVE AN EXACT LOCATION, E.G., RAILWAY BRIDGE 775386. IN THE CASE OF OBLIQUE, THE NEAR BOUNDARY OF THE AREA TO BE PHOTOGRAPHED WILL BE GIVEN. ROUTE AND AREA BOUNDARIES WILL BE GIVEN FOR ROUTE OR AREA RECONNAISSANCE.
- P. **OBJECT OF THE REQUEST AND RESULTS DESIRED:** IT IS IMPORTANT THAT THE EXACT PURPOSE OF THE REQUEST IS STATED IN ORDER THAT THE MOST SATISFACTORY RESULTS MAY BE OBTAINED.
- Q. **PHOTO SCALE OR LIMITS ACCEPTABLE:** WHENEVER POSSIBLE, THIS HEADING SHOULD BE FILLED IN ON THE ADVICE OF AN IMAGERY INTERPRETER. THE SCALE SHOULD BE QUOTED IN FIGURES, E.G., 1/1000D.
- R. **NUMBER OF PRINTS, PLOTS, OR REPORTS REQUIRED:** THIS SHOULD NEVER EXCEED THE NUMBER ACTUALLY REQUIRED. IF AN IMAGERY INTERPRETATION REPORT WILL SUFFICE, PRINTS SHOULD NOT BE ORDERED.
- S. **DELIVERY ADDRESS, DATE, TIME:** STATE CLEARLY WHERE THE PRINTS, PLOTS, OR REPORTS ARE TO BE DELIVERED AND THE TIME AND DATE ON WHICH THEY ARE REQUIRED. IF THERE IS NO HASTE, AS MUCH TIME AS POSSIBLE SHOULD BE GIVEN FOR FINAL DELIVERY SO AS TO ALLOW REQUESTS OF A MORE URGENT NATURE TO BE GIVEN PRIORITY.
- T. **LATEST ACCEPTABLE TIME AND DATE:** THE DATE OR TIME AFTER WHICH THE PRINTS, PLOTS, OR REPORTS ARE NOT LONGER REQUIRED. IF DELIVERY CANNOT BE MADE BY THE DATE STATED, THE REQUEST WILL BE CANCELED.
- U. **SPECIAL INSTRUCTIONS:** THE DEGREE OF URGENCY, OR WHEN MAKING MORE THAN ONE REQUEST, THE DEGREE OF PRIORITY, AND THE SECURITY CLASSIFICATION OF THE MATERIAL REQUESTED. GIVE ANY INSTRUCTIONS OR INFORMATION NOT ALREADY PROVIDED, THAT WILL AID THE PLANNING, OR SUCCESSFUL ACCOMPLISHMENT OF THE MISSION, NAME AND TELEPHONE NUMBER OF CONTACT OFFICER AND DESIRED TIME OVER TARGET IF APPLICABLE.

SECTION II. COMPLETED BY ARMY ACTION AGENCY AT ECHELON OF COMMAND ABOVE REQUESTING AGENCY.

- ITEM 1: INDICATE UNIT, DATE, TIME.
ITEM 2, 4, 6, 7, 8: INDICATE INITIAL, DATE, TIME.

SECTION III. COMPLETED BY AIR FORCE ACTION RECONNAISSANCE SECTION.

- ITEM 1: INDICATE UNIT, DATE, TIME. ITEM 2, 3, 5: INDICATE INITIALS, DATE, AND TIME.

SECTION IV. ITEM 3: AIRCRAFT CALL SIGN OR NUMBER. ITEM 6: AGENCY CONTROLLING MISSION.

- ITEM 7: TO INDICATE METHOD WHICH MISSION DATA (SECTION I) WILL BE TRANSMITTED TO THE ACCOMPLISHING UNIT, I.E., FRAG ORDER OR "IMMEDIATE REQUEST".
ITEM 8: SHOW INITIAL DATE AND TIME.

Figure 5-3. Instructions for completing form.

(5) The MIBARS detachment commander issues a "be prepared" order to his II and reproduction sections in anticipation of receipt of the imagery.

(6) The II section posts the mission requirements on the section's mission status log and prepares a mission record form.

5-5. Collection

a. General. Of primary concern to the MIBARS is the type of imagery that becomes a permanent record because of its importance to commanders in planning, conducting, and evaluating their operations. Collection techniques vary from a simple camera system to the complex and expensive camera arrays, radars, and infrared sensors mounted in high performance Air Force aircraft. A limitation inherent in all types of permanent record imagery is the time lag that exists from the time the information is recorded to the time it is made available to the commander. Changes in the situation occurring during this interval could render the imagery valueless or even dangerous; therefore, speed is essential in all MIBARS operations.

b. MIBARS Involvement.

(1) MIBARS participation in the processing of a mission request is rather limited. However, if we consider the imagery interpretation process as part of the collection effort, then we can say that the MIBARS becomes substantially involved late in the collection step. From here on, the MIBARS is the main contributor.

(2) Upon return of the mission aircraft, the following collection activities occur:

(a) The ARLO debriefs the flight crew.

(b) The Air Force photographic processing unit develops the raw film. As soon as a negative has been developed, it is given a simultaneous rapid inspection by image interpreters from both the Air Force and the MIBARS. This initial check is made only to satisfy the requester's EEI and to identify any items of clearly significant intelligence value.

(c) Upon completion of the initial check, the Air Force photographic processing unit prepares an additional negative plus other reproductions as requested and gives them to the MIBARS detachment II section.

(d) The MIBARS detachment accomplished the necessary imagery interpretation.

Section III. DISSEMINATION OF MISSION RESULTS

5-6. General

Dissemination of the intelligence information obtained by the use of airborne sensors is accomplished by means of reports prepared after an examination of the imagery and by distribution of the imagery itself. The imagery is of limited value to an organization unless there are trained image interpreters available. To avoid wasteful and unnecessary reproduction and delivery of imagery, requesters without image interpreters should not request imagery and be satisfied with reports only or selected prints.

5-7. Type Mission Reports

a. General. Because of the wide range of reports and the diversity of conditions under which they are prepared, there is often considerable latitude in selecting the format for the individual reports. However, all reports must contain certain standard information, to include:

(1) Identification of the reporting organization.

(2) Number and date of report.

(3) Name, location, and coordinates of the area, activity, installation, or item being reported upon.

(4) Identification of the organization taking the imagery, mission or sortie numbers, print numbers, and date, scale, and quality of the imagery.

(5) Appropriate map reference.

(6) Classification.

The discussion and summary of reports presented in this section pertains to US Army standard imagery interpretation reports. NATO standard imagery interpretation reports are identical in title and format to those discussed in *c*, *d*, *e*, and *f*, below. Changes in report titles and the formats necessary under certain circumstances are explained in the various international agreements discussed in chapter 7. (For a further discussion of these reports and those formats not shown, see chap 6 of TM 30-245.) The MIBARS commander must adhere to those requirements applicable to his particular area of operations and operational situation when determining the type of imagery interpretation report titles and for-

mats his unit is to use. It should be emphasized at this point that the S2/S3 must insure that maximum signal security measures are employed when electrically transmitting these reports.

b. Inflight Report. The inflight report is rendered by the aircrew while the mission is in progress and gives any urgent tactical information noted by the aircrew. The report is prepared in the format shown in figure 5-4 and submitted by the pilot as he deems necessary. The report is transmitted by radio over the spot report receiver system (fig. 5-5). This permits it to be monitored by the TACC at field army, by DASC at corps, and by tactical headquarters down to the battalion level. Local SOP must provide for retransmission down to the requester's level as necessary, and should also provide for the secure transmission of urgent tactical information to units concerned. The report should be transmitted by secure voice means (or an approved operations code should be used) and on a previously agreed upon frequency. (It is suggested that the frequency be entered in item 9, section IV of the request form (fig. 5-2), and posted on the various mission status boards.) However, information received in the clear can be retransmitted in the clear unless there are overriding EW (ECCM) constraints.

c. Mission Report (MISREP). A mission report is submitted at the conclusion of each mis-

sion debriefing and informs the requester of the mission results and passes on any significant visual observations noted by the aircrew. It includes any inflight report made by the aircrew as well as any Hot Photo Report sent by the ARLO prior to the initial II readout of the imagery. The format for the report is shown in figure 3-5. The report is prepared by the ARLO or ARLO assistant immediately following his debriefing of the aircrew, and is transmitted to the requester and other interested parties by radio, teletype, or telephone, using secure circuits, usually within 30 minutes after the aircraft lands.

d. Hot Photo Report (HOTPHOTOREP). The hot photo report, usually the first report actually containing information gathered from the mission imagery, is prepared by the image interpreter after an immediate, rapid inspection of the initial negative. The HOTPHOTOREP can also be used to supplement or amend the MISREP, and is transmitted via radio, teletype, or telephone, using secure circuits where available, to the requester and all interested agencies within one hour after the aircraft lands. If additional study of the imagery reveals further significant and urgent information, another HOTPHOTOREP can be submitted. If study of the imagery reveals only information previously reported in the MISREP, it is not necessary to submit a HOTPHOTOREP. However, a negative report

TRANSMITTED BY VOICE RADIO	
FORMAT (NOT TO BE TRANSMITTED)	EXAMPLE MESSAGE
INFLIGHT REPORT: ALWAYS START OF MESSAGE. AIR TASK/MISSION NO. A. LOCATION IDENTIFIER (ONLY IF NECESSARY FOR CLARIFICATION) B. TIME ON TARGET/TIME OF SIGHTING. C. RESULTS. RESULTS OF MISSION, BRIEF DESCRIPTION OF OBSERVATION, RECOMMENDATION FOR ATTACK/REATTACK IF NECESSARY.	INFLIGHT REPORT. 3/A501. A. LC 7354. B. TARGET SIGHTED 1610Z. C. OBSERVED FIVE TANKS IN WOODLINE. FIVE ADDITIONAL TANKS WITH TROOPS SEEN MOVING WEST OUT OF HOF AT 1615Z.

Figure 5-4. Inflight report.

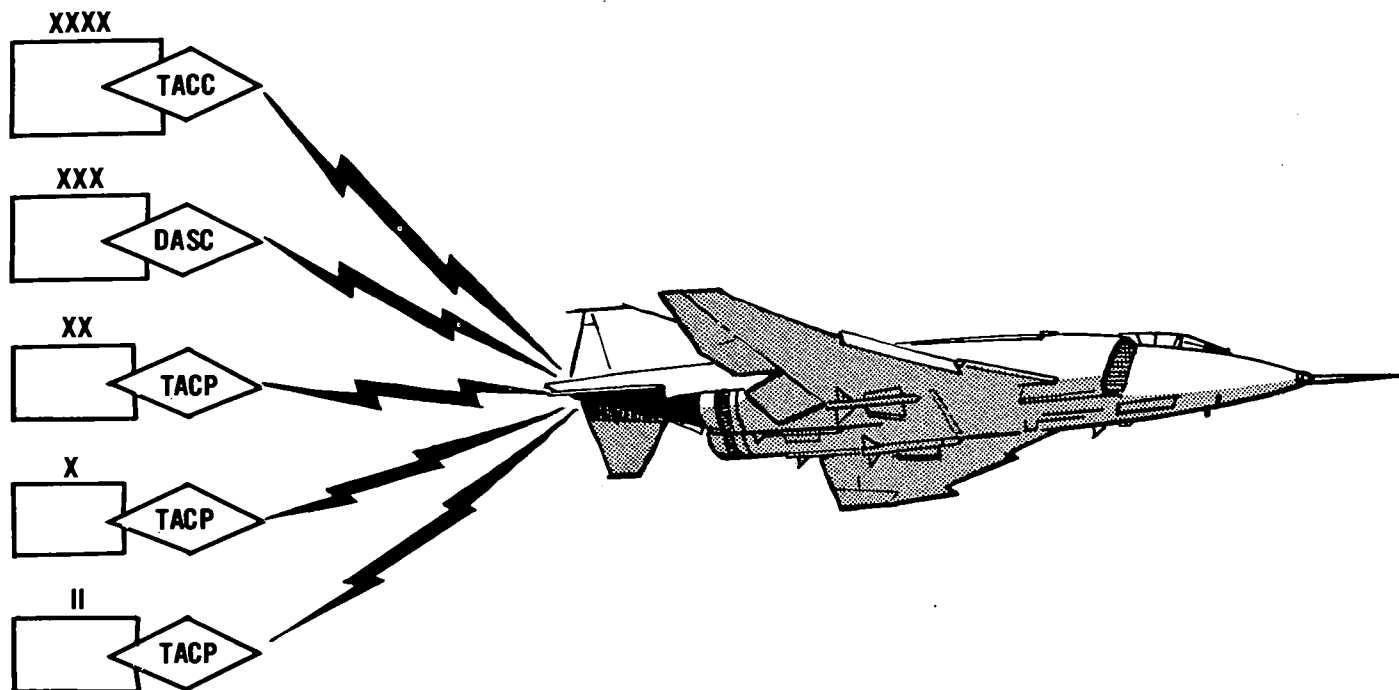


Figure 5-5. Spot report receiver system.

should be sent if the requester has asked for a HOTPHOTOREP.

e. Immediate Photo Interpretation Report (IPIR). The purpose of the immediate photo interpretation report, which is prepared by the image interpreter after a more thorough study of the imagery, is to provide more detailed information concerning the target area. It deals with only one imagery mission and includes an evaluation of the quality of the imagery and area coverage accomplished. This report is furnished to the mission requester only when specifically requested. However, if further study shows significant information not reported in the MIS-REP or HOTPHOTOREP, an IPIR will be furnished the requester and other interested agencies. This report is sent by radio, teletype, or telephone, using secure circuits where available, within four hours after the aircraft lands.

f. Supplemental Photo Interpretation Report (SUPIR). The SUPIR is a second phase exploitation report of all photography obtained on a given mission. Within resources, priority for review will be given to approved reconnaissance objectives. This report provides additional information to that provided in the IPIR and may be published incrementally. The goal to be realized is a complete intelligence readout of the mis-

sion. It will be prepared in both man and machine readable form suitable for electrical transmission. Further detail on the SUPIR is contained in DIAM 57-5 and FM 30-20.

g. General Imagery Interpretation Report (GIIR). The GIIR is designed to provide detailed intelligence information in response to a specific request, primarily to assist in planning future operations. It may be made from a new mission specifically flown for the requirement or from existing coverage. No special format is used; the content will vary according to the requirements of the information being reported. Reports are submitted to meet the time limitations imposed by the requester.

h. Negative Report. Negative reports normally are transmitted to the requester only, primarily to reassure him that the mission has been performed and that positive findings have not been misrouted. To minimize administrative effort, all negative reports, with the exception of negative HOTPHOTOREP, can be consolidated daily and one message addressed and sent to all requesters concerned. Negative HOTPHOTOREP's should be transmitted within the normal one-hour time frame.

i. Cover Trace. As each mission is received,

the II section at detachment level checks the package for completeness (pilot trace, etc.) and prepares a cover trace. If the package is incomplete, a mission discrepancies report (fig. 5-6) is sent to the detachment ARLO.

5-8. Dissemination Procedures

a. If the requester has asked for imagery, the II section will give one copy of each negative to the reproduction section so that it can prepare the prints while the II section interprets the other negatives or the diapositives (positive

transparencies). Some image interpreters prefer to work from negatives; others prefer diapositives. When reproduction is complete, the prints are given to the delivery platoon, and the negatives are sent to the detachment film library.

b. After the detailed reports have been prepared, the diapositives are usually destroyed because of space limitations. The negatives/diapositives must be destroyed in a manner which accomplishes silver recovery.

c. The precise determination as to whether a report, negative, imagery, etc., is *delivered by*

REPORT OF MISSION DISCREPANCIES				
TO:		FROM:		
SECTION I - MISSIONS RECEIVED WITHOUT PILOT'S TRACES				
MISSION NUMBER	DATE FLOWN	DATE RECEIVED		
SECTION II - INCOMPLETE MISSIONS RECEIVED				
MISSION NUMBER	DATE FLOWN	DATE RECEIVED	PORTION MISSING	
SECTION III - MISSIONS RECEIVED ON OR AFTER DATE NO LONGER OF VALUE (DNLV)				
MISSION NUMBER	DATE FLOWN	DATE RECEIVED	DNLV	
SECTION IV - MISSIONS RECEIVED ERRONEOUSLY				
MISSION NUMBER	DATE FLOWN	DATE RECEIVED	ADDRESSED TO	SHOULD HAVE GONE TO
DATE:		SIGNATURE:		

Figure 5-6. Type report of mission discrepancies.

one section to another or *picked up from* one section by another depends upon their physical location with respect to each other, their workloads, and possible day-to-day strength variations. The detachment commander will supervise the entire operation and devise his SOP to insure the most rapid handling possible.

d. Detailed imagery interpretation reports and bulk reproduction missions required in support of special projects are normally accomplished at

battalion level under the supervision of the battalion operations and intelligence section.

e. Upon request the MIBARS also provides photographic imagery of the area of interest to all tactical units as directed by the G2 Air, field army. Reproduction and distribution of initial and subsequent coverage are accomplished at the MIBARS battalion level, and the negatives are retained by the battalion library and reports section.

Section IV. RECORDS

5-9. General

Most of the records prepared and maintained by the MIBARS and its detachments are primarily administrative. Because of the vast amount of imagery processed, operational aids are required to maintain control, to insure that each request is processed promptly and completely, and to eliminate unnecessary duplication of effort. The aids or records discussed below have no prescribed format, but the type formats shown or discussed have been used successfully in the field.

5-10. Master Cover Trace

The master cover trace is an overlay to a map of suitable scale, showing the mission number and the precise area covered by each aerial surveillance/reconnaissance mission processed by the MIBARS. It is also a reference to all imagery available in the film library of the library and reports section and is prepared and maintained by this section. The master cover trace is a consolidation of all detachment cover traces, and copies of it are furnished to the G2 Air at field army and each of the corps serviced by the field army. As new imagery is received, the area covered is plotted on the overlay before the negatives are placed in storage. When imagery is destroyed, the master cover trace is amended. The master cover trace may be color coded to indicate the type of imagery or photography being depicted, and each plot must show the mission number or be cross-referenced to the film library's card index so that it can be located quickly. The master cover trace as well as the cover traces of the detachments are updated daily, and revisions prepared and distributed as frequently as resources permit. Lateral dissemination of cover traces should be made between detachments.

5-11. Area Data Base

The area data base is a pictorial representation of the information contained in the interpretation reports prepared from each mission. Information from each mission is plotted, using appropriate military symbols, on tactical scale maps or on an overlay. As new information is received, the area data base is updated. At the MIBARS detachment level the area data base is prepared and maintained by the II section. As an aid to tactical unit commanders down to battalion level, the MIBARS can furnish, on a monthly basis, extracts of the area data base. The area data base also has another useful function. If carefully maintained and furnished to tactical units as SOP, interpretation reports on subsequent missions need include only those items which constitute changes from the most recently disseminated data base. This significantly reduces the volume of material to be included in the report. (An exception to this procedure is that reports should always include all information pertaining to the requester's EEI.)

5-12. Mission Status Log and Mission Status Board

Most sections of the MIBARS at battalion and detachment levels will maintain a mission status board or a mission status log (fig. 3-4). These are controls to insure that all mission requirements are fulfilled and to aid in determining the current status of any mission. The mission status board is not a permanent record, but is valuable because it provides an easily seen summary of the status of missions in progress. As missions are completed, they are removed from the board and replaced by new missions. A permanent record is maintained by posting the entries from the mission status board to a mission status log. This

will provide a source of statistical data and permit relatively easy periodic compilations that can be used to measure the unit's efficiency and workload, or as a basis for planning. Posting the mission status board begins with receipt of the air reconnaissance request and continues until the requester has indicated receipt of all mission requirements. The Air Force mission number is used as the control number throughout and may be the number under which the imagery is stored in the film library.

5-13. Mission Record

The mission record, like the mission status board and mission status log, is a control device. Unlike the other two, however, the mission record travels with the imagery through the various elements of the MIBARS. The mission record form is initiated upon receipt of the mission requirements contained in the air reconnaissance request form. (The request will normally be received by the ARLO at detachment level, but could be received by the senior ARLO or the battalion operations and intelligence section.) The section

receiving the request will enter the mission requirements on a mission record form, and forward the form to the appropriate II section. When the imagery is received, the mission record form is placed with the imagery and remains with it throughout the processing. The form should be prepared in duplicate so that one copy can travel with the imagery while the other can be maintained in a suspense file. This permits the detachment to ascertain its forthcoming workload at any time. When the mission has been delivered, the completed form is filed and the suspense copy destroyed. The completed forms will indicate the time required to accomplish the various portions of the mission requirements and can assist in pinpointing problem areas. A well-designed mission record form (a type form is shown in fig. 5-7 and explained in fig. 5-8) can serve as a combined routing slip, work order, and receipt form.

5-14. Film Library Card Index

In an active situation, film stored in the detachment or battalion film library accumulates rapidly,

MISSION RECORD										
MISSION DATA			CONTROL DATA					OTHER DATA		
Mission No.	3-1-103		ORGANIZATION		ITEM		Routing		Time	
Requester	Inf Div		1. Requester	A. Request		Item	From	To	Sent	Rec'd
Preplanned	X Immediate		2. Bn ARLO	B. Dup Neg		A	1		311005	
Priority	2 DNLV 3 Feb		3. Bn Op	C. Dup Pos		A		7	311100	
Prior coverage acceptable			4. Bn II	D. Prints		B(1)	14		011015	
Yes	No X		5. Bn Repro	E. Overlay		I		1	1038	
Prior coverage to be used			6. Bn Lib & Rpts	F. Pilot trace		G		1	1050	
Mission	Frames N/A		7. Det ARLO	G. HOTPHOTOREP Msg		B(1)C(6)	14		1200	
EEL: Location of enemy			8. Det Op	H. HOTPHOTOREP Copy		B(1)		10	1205	
defensive installations			9. Det II	I. MISREP Msg		C(1)		9	1205	
			10. Det Repro	J. MISREP Copy		O		7	1210	
Date flown	1 Feb Scale 1/10,000		11. Det Lib	K. IPIR Msg		C(1)HJ		12	1212	
% Coverage	100% Quality Good		12. Det Pht	L. IPIR Copy		C(1)HJ		1	1215	
Mission Requirements:			13. Comm Sec	M. SUPIR Msg		F	14		1230	
	Yes	No	14. USAF	N. SUPIR Copy		D	10		1320	
			OTHER (Specify)	O. Discrep Rpt		K		15 16	1340	
HOTREP	X	3	15. - Corps	OTHER (Specify)		P	1		1345	
MISREP	X	3	16. JTF Hq	P. Ack Receipt		B(2)	9		1345	
IPIR	X	3	17.	Q.		B(1)		11	1350	
SUPIR		X	18.	R.		E	9		1430	
Overlay	X	3	19.	S.		L		15 16	1530	
Prints	X	4	20.	T.		B(1)D EFL		12	1600	
All requirements compl	011425		SPECIAL INSTRUCTIONS:			DE L		1	1617	
Receipts acknowledged	011748		Selective printing of significant frames.			B(1)F		6	1617	
Total response time	7hrs 33min					P	1		1748	
*From receipt of imagery			(12 frames printed)			P	6		1815	
								II Section		
								Start Complete		
								HOTPHOTOREP 011020 1045		
								IPIR 1050 1330		
								SUPIR		
								Overlay 1335 1425		
								Data Base 1430 1515		
								Total Time 4hr 55min		
								No. Frames int. 45		
								No. Items ident 83		
								REPRO Section		
								Start Repro 1245		
								Complete Repro 1315		
								No. Prints 48		
								LIB Section		
								Master cover trace updated 1545		
								Film index card prepared 1410		
								Storage location Aisle 3, Shelf 3, Bin 2		

Figure 5-7. Type mission record.

EXPLANATORY NOTES

Figure 5-7 shows how the file copy of a mission record might appear after the mission has been completed. The operations element of the II section has consolidated significant entries of the mission record forms that accompanied each portion of the mission as it was being processed. From this consolidation it is possible to trace the entire procedure. An explanation of selected entries follows:

1. The request was received at 1005 hours on 31 January and a copy sent to the ARLO at 1100 hours.
2. One set of duplicate negatives was received at 1015 hours on 1 February. The II section started initial readout at 1020 hours and completed the HOTREP at 1045 hours. The HOTREP was transmitted at 1050 hours.
3. The other duplicate negative and two duplicate positives were received at 1200 hours. The pilot trace was missing, so a mission discrepancy report was sent to the ARLO at 1210 hours.
4. One set of duplicate positives and hard copies of the HOTREP and the MISREP were turned over to the delivery platoon, for delivery to the requester, at 1212 hours.
5. The IPIR was transmitted to the requester and to higher headquarters at 1340 hours.
6. The operations element continued to collect portions of the mission as they were completed. At 1600 hours these were turned over to the delivery platoon.
7. The final delivery run started at 1617 hours. At 1748 the requester acknowledged receipt of the prints, overlays, and IPIR hard copies. The battalion library and reports section received one set of duplicate negatives and the pilot trace at 1815 hours.

Figure 5-8. Explanatory notes—mission record.

making it impossible for the film librarian to remember where each mission is stored; therefore, a card index file, or a film reference list, is an invaluable aid in locating film on hand. If, in addition to the storage location of each mission, the date of imagery, type and quality of coverage, camera system, and scale are included, the index file will show quickly whether acceptable prior coverage is available for any particular

mission. The G2 Air, or MIBARS representative working with him (para 4-6), upon learning of an impending requirement, need only consult his master cover trace for a film library cross-reference number and then contact the appropriate librarian for details pertaining to those missions. He can then advise the requester as to what is available, and the requester can tell him if it is acceptable.

Section V. BATTALION LEVEL OPERATIONS

5-15. Battalion Command Section

Due to the nature of the MIBARS employment and its somewhat unusual structure, special op-

erational requirements make it necessary for the battalion command section to become involved to a considerable extent in the activities beyond

the normal scope of command, supervision, and administration.

a. Members of the battalion command section must conduct extensive personal liaison and coordination. Because of the MIBARS position as an action agency for a staff section (G2), and because of certain organizational limitation (e.g., the lack of mess sections at detachment level), the MIBARS commander must rely extensively upon close personal rapport with other staff sections and commanders to obtain the necessary support to perform his mission and to support his personnel. In this regard, it is particularly important to establish a close working relationship with the commander and the deputy commander of the supported unit, the G1, the G3, the signal officer, the engineer officer, and the aviation officer.

b. Because the mission of the MIBARS is to give the Army immediate access to information obtained by the Air Force, MIBARS personnel live with and are dependent upon the Air Force for support. Therefore, both mission accomplishment and personnel well-being require extensive personal coordination and liaison at all levels. Although the field army commander can certainly influence the Air Force component commander, a close rapport at the reconnaissance wing/MIBARS battalion level can result in a degree of support that far exceeds minimum requirements. The MIBARS has a section specifically designed for coordination with the Air Force; nevertheless, the command section can and should set the tone of the working relationship.

c. The fact that the supported commanders and staffs may be unfamiliar with the MIBARS requires the MIBARS command section to engage in an extensive educational campaign. The commanders and staffs from field army down must understand the capabilities, the limitations, and the preferred method of employment of the MIBARS. They must be informed of the MIBARS ability to contribute to overall mission accomplishment; e.g., assisting in preparing terrain studies for the engineer officer or assisting the G4 in determining suitable locations for supply depots or port facilities. These are just some of the ways, over and above normal functions, that the MIBARS can assist other elements of the command.

5-16. Operations and Intelligence Section

a. *General.* The functions of the operations and

intelligence section fall generally into three categories; staff supervision over the operation of the MIBARS detachments, direct supervision over elements of the battalion headquarters and headquarters company, and direction of the security activities of the battalion. The S2/S3 exercises direct supervision over this section.

b. *Directly Supervised Elements.* Operations of the imagery interpretation section, the reproduction section, and the delivery platoon at battalion level which come under the direct supervision of the operations and intelligence section are essentially the same as at detachment level. Paragraphs 5-21 through 5-23 detail the procedures of these sections. However, the type of missions being processed differ. At detachment level, the bulk of the effort is devoted to processing missions in support of current or imminent corps and subordinate unit tactical operations and plans. Although the battalion headquarters will undoubtedly process some tactical missions, most of its work will be devoted to special projects and studies in support of field army plans and programs. These may not require as expeditious handling as missions processed at detachment level, but they will probably require more detailed and sophisticated interpretation, reporting, and reproduction.

5-17. Imagery Interpretation Section (HHC)

Personnel of the II section should be stationed, if possible, at the airfield used by the supporting Air Force. This will minimize the time required to receive the imagery from the Air Force and to deliver the imagery and reports to the delivery platoon. It is possible that the two sections may work directly with their Air Force counterparts. Individual members of the II section or reproduction section, may, upon the recommendation of the S2/S3 and the approval of the commander, be reassigned temporarily to one of the detachments to relieve a particular problem area.

5-18. Library and Reports Section (HHC)

a. *General.* The library and reports section maintains a library of reference materials, negatives and publications for the battalion. A reports file is also kept for use by the MIBARS and other elements of the field army. The primary function of this section is to make prior imagery coverage readily available to the field army. This involves the storage of negatives of all reconnaissance/surveillance missions processed by the MIBARS and the development of a retrieval system

for the stored negatives. Related to this primary function is the preparation of the master cover trace (para 5-10).

b. Film Library. The film library stores in a readily accessible location all recent imagery coverage taken of the field army's area of responsibility. The library and reports section, and ideally the G2 Air, must know exactly what coverage is available and then be able to retrieve a specific portion of this coverage quickly and easily. This is done by using a cross-referenced retrieval system consisting of the master cover trace and a card index file. The card index file or imagery log book lists available coverage by mission number as well as the type and quality of coverage, the date flown, and the scale. The camera system used and the target number(s) of targets covered in the mission may also be indicated in the file. The G2 Air is furnished a copy of the master cover trace and may also be given a copy of the imagery log book. The field army G2 will establish the length of time that imagery is to be retained in the film library. By means of the master cover trace and the card index file, the G2 Air can quickly advise the requester as to what coverage is available, how recent it is, and determine if it will satisfy his needs. (Making this determination at the G2 Air/requester level is less time-consuming than sending the request to the library and reports section for the same information and then checking back with the requester.) Oftentimes, in cases where the requester's need is urgent, available prior to coverage may fulfill his requirements. It is quicker to reprint a previous mission and send it, together with any reports on that mission, to the requester than to schedule and process a completely new mission. It is also more efficient in utilization of material and allocated missions. Each request satisfied from the film library means

one additional request that can be scheduled against the daily allocation of reconnaissance missions. The fact that prior coverage is available and acceptable, however, does not mean that a requester must be satisfied with it alone. In cases where urgency is not a major factor, the requester may desire a new mission to determine if any significant changes have occurred in the area over a certain period of time. Making the film readily accessible is simply a matter of noting, on the card file or log of imagery, its storage location in the film library. The master cover trace and log of imagery also enable the library and reports section to keep its film library current. When an area previously covered is again covered, the pilot's trace is plotted on the master cover trace, the outdated mission can be readily identified. It is then removed from the library and destroyed. If the command being supported works primarily from a target numbering system, as opposed to an area coverage system, the film librarian should cross-reference the target numbers to mission numbers. However, the possibility of human error is increased with each additional numbering system and cross-reference list in use.

5-19. Delivery Platoon

The delivery platoon delivers reports and imagery and provides courier service for MIBARS by means of five organic aircraft. It is capable of performing at least three daily deliveries, as required, from each reconnaissance airfield to the field army headquarters and to each corps of the field army. Normally the platoon is located at the field army aviation strip. If this proves to be impractical or there are no Army airstrips in the vicinity of either the MIBARS or FATOC, the platoon can be located at the most convenient tactical air force reconnaissance strip.

Section VI. DETACHMENT OPERATIONS

5-20. General

Operations at detachment level are usually conducted in the same manner as at battalion level. Because of the lower echelon, more emphasis is placed upon support of tactical operations and less on special studies; therefore, at detachment level there will be a greater requirement to expedite mission accomplishment. Because of this shift in emphasis toward support of tactical operations, discussion of the operations of the imagery interpretation section, the reproduction sec-

tion, the delivery platoon, and some aspects of ARLO operations have been delayed until this point.

5-21. Command Section

a. General. The comments made earlier concerning command operations at battalion level are generally applicable to the detachment. Actually, the need for liaison, coordination, and briefing activities is even greater at the lower level than at the higher. It is in support of

tactical operations that the battalion can be of most assistance to the command. This requires a flexible approach and detailed, continuous supervision in devising and implementing operating procedures, particularly at detachment level.

b. Air Reconnaissance Liaison Section. The air reconnaissance liaison section's functions and techniques at detachment level are also essentially the same as those required at battalion, the principal difference being a shift in emphasis. The detachment ARLO will devote more time to briefing and debriefing aircrews and less to briefing commanders.

(1) *Premission briefing.* The probability that an air reconnaissance mission will satisfy the requester's needs is greatly increased in Air Force personnel who are to fly the mission know exactly what is wanted. For this reason, every mission is preceded by as detailed a briefing as time and available information permit. For an immediate mission in which an aircraft in flight is diverted from one target to another, this briefing will be very short, possibly only radioed instructions to the pilot giving him the location of his new target. The ARLO will be alerted to pending pre-planned missions by receipt of a copy of the mission request through MIBARS operational channels. He must then research all information available concerning the target, flight hazards that may be encountered, and call signs and frequencies needed by the pilot for monitoring aircraft warning data for artillery and other supporting fires. Shortly before the mission the ARLO will brief the aircrew, answer any questions, and discuss the submission of inflight reports. The briefing may be conducted separately or in conjunction with briefings presented by Air Force personnel. There is no prescribed format, but a guide such as that shown in figure 3-6 is suggested to insure complete coverage of the necessary information.

(2) *Postmission debriefing.* Immediately upon the conclusion of the mission, while the imagery is being processed, the ARLO will debrief the aircrew. The information gained in this debriefing, plus information contained in the inflight reports, constitutes the mission report (MISREP), figure 3-5. This report is submitted (usually telephonically) by the ARLO to the requester upon the conclusion of the debriefing. There is no prescribed format for the debriefing, but certain subjects must be covered and included in the MISREP. A suggested checklist which will insure thoroughness is depicted in figure 3-7.

The debriefing is conducted informally, with due consideration being given to the physical condition of the aircrew. Crew members are normally interviewed individually to preclude their being influenced by one another.

5-22. Detachment Imagery Interpretation (II) Section

a. General. The detachment imagery interpretation section is the focal point of detachment operations. It performs for the detachment the same functions performed at battalion level by the imagery interpretation section, the library and reports section, and the operations portion of the operations and intelligence section. The detachment II section consists of an II element, an operational element, and a film library element. The techniques and procedures employed by the latter in maintaining the film library and master cover trace are identical with those employed by the battalion library and reports section.

b. Tactical Imagery Interpretation Facility, AN/TSQ-43 (TIIF).

(1) *General.* The major item of equipment of interest to the II section is the tactical imagery interpretation facility, AN/TSQ-43 (TIIF). There are ten TIIF's in the MIBARS—two per detachment and an additional two at headquarters and headquarters company. The TIIF is a mobile unit containing photographic interpretation equipment and communications facilities. The TIIF is equipped for viewing, comparing, interpreting, and measuring aerial photography, infrared, and radar images. Old and new photographic material can be scanned and compared at any one of several viewing stations. Accurate measurements of areas of particular interest such as linear distances (point to point), curvilinear distances (point to point along a curved line), cumulative distances, area within any selected closed curve, relief distances, and target coordinate points (both UTM and geographic) are automatically computed to make tactical information immediately available.

(2) Specifications.

(a) The communications equipment in the present configuration includes telephone and teletype. In addition to the major operational equipment, storage space for reference material and film reels is provided.

(b) The equipment is contained in an expandable van, type M4, which is mounted on a 5-ton truck chassis, type M46. When expanded, the van interior is approximately 17 feet long

and 13 1/2 feet wide. The van temperature is controlled by a 36,000 BTU/hr air conditioner and two 60,000 BTU/hr gasoline space heaters. A special environment controller container, Optics Case BM-46, is provided for storage of optical equipment. (See fig. 5-9 and 5-10 for illustration and layout of TIIF.)

(c) Input power requirements for the TIIF are 208 volts, 60 cycle, three phase, four wire. These power requirements can be provided by the two trailer-mounted 30 kw generator sets PU-406. In transit, one generator set is towed by the TIIF and the other is towed by the II section's 2 1/2-ton truck. Technical data on the tactical imagery interpretation facility is contained in TM 11-5895-431-12.

c. *Initial Processing.* Incoming imagery will be

received from the Air Force by the operations element, which must accomplish three initial administrative steps before the imagery is forwarded for interpretation. The mission status board must be posted, the mission must be checked for completeness, and the mission record (fig. 5-7) must be prepared. This administrative process must not unduly restrict expeditious availability for interpretation of the incoming imagery. Moreover, it is desirable to accomplish both processes concurrently. If the operations element notes that the mission is incomplete in any respect (e.g., no pilot trace), the ARLO is notified immediately and a written report such as shown in figure 5-6 is prepared. (The II element may subsequently note discrepancies, in which case it will notify the operations element, which will take the same actions.) The mission

TACTICAL IMAGERY INTERPRETATION FACILITY AN/TSQ-43

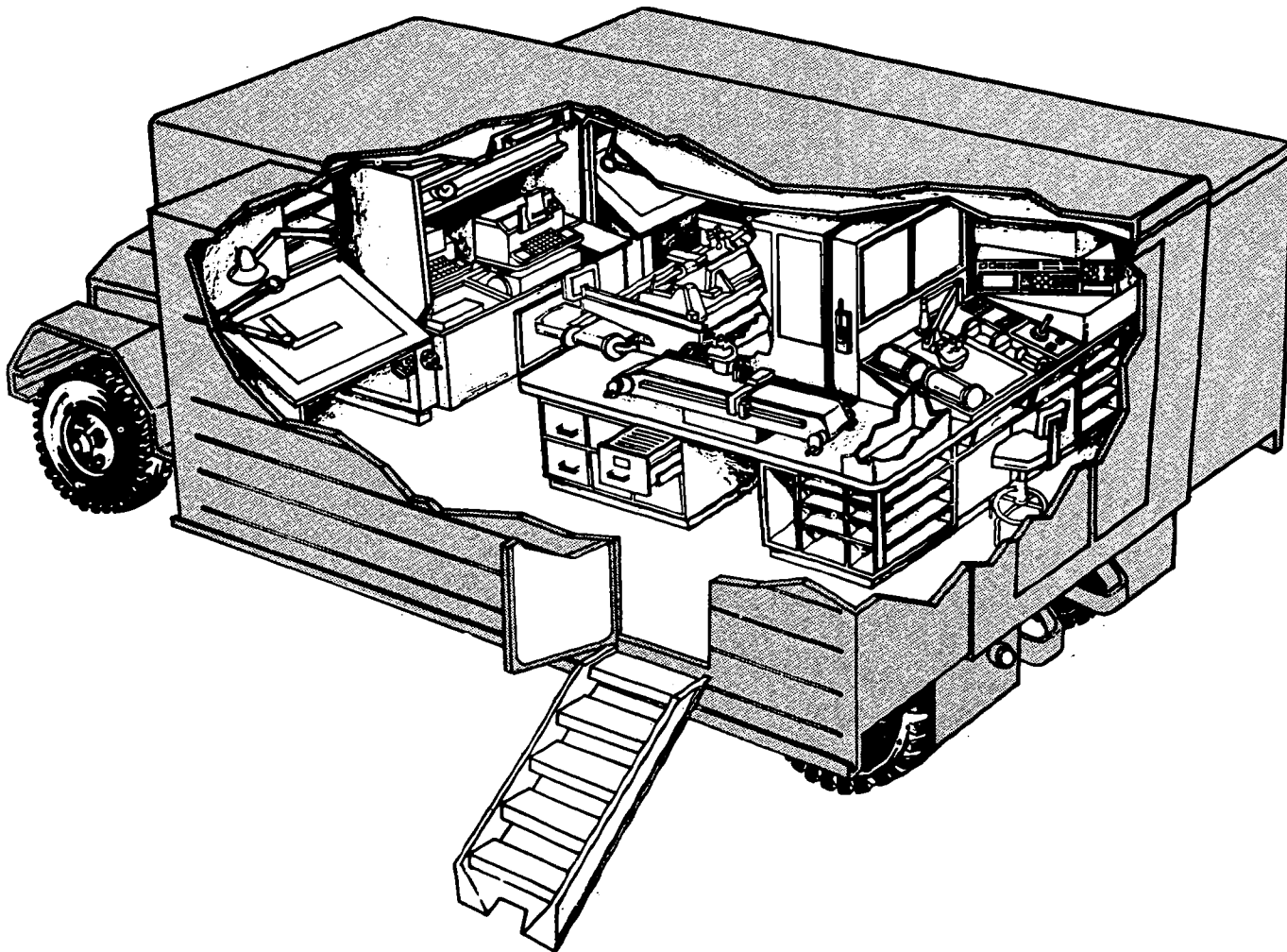


Figure 5-9. Illustration of TIIF.

AN/TSQ-43

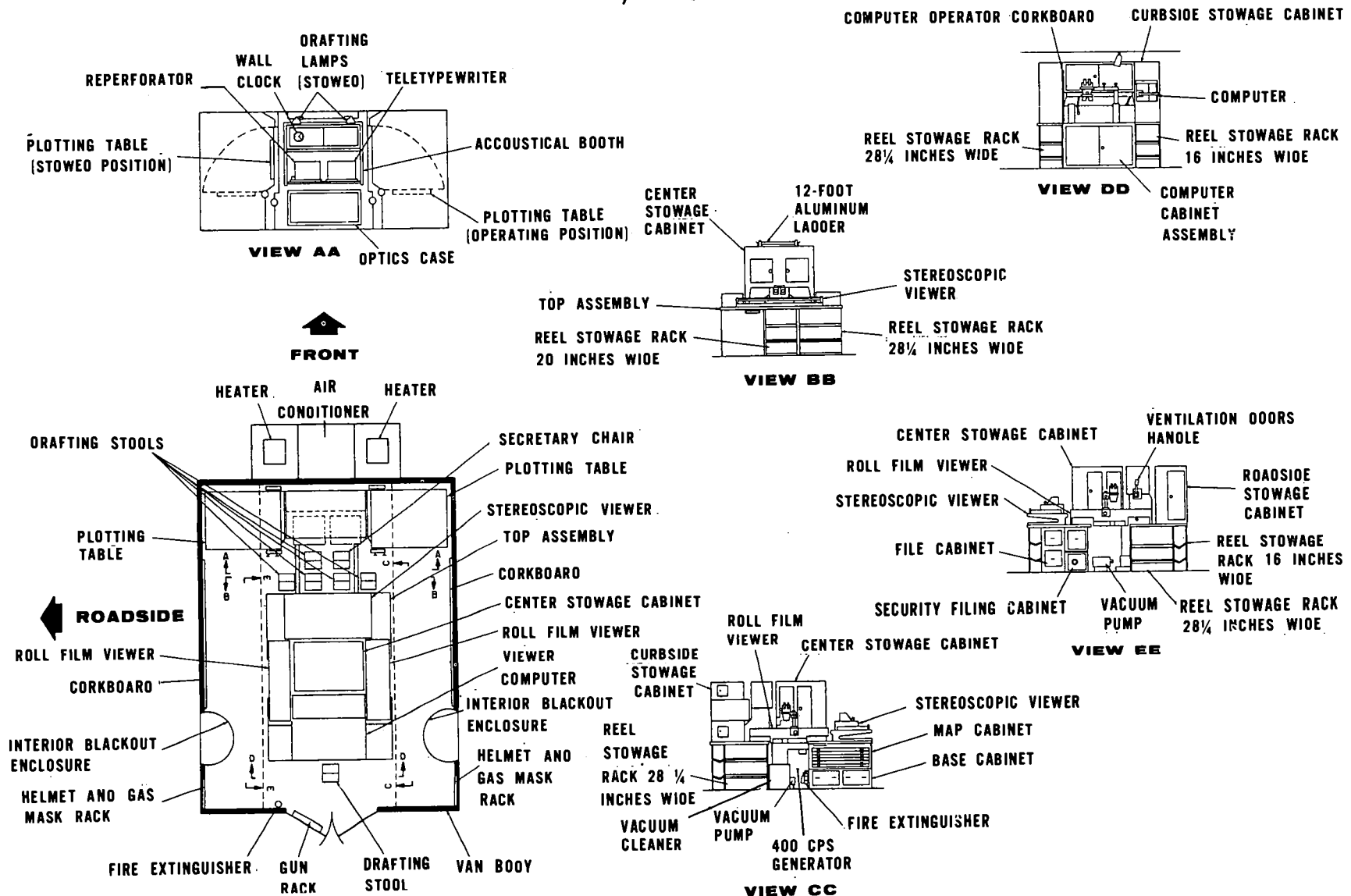


Figure 5-10. Layout of TIIF.

record should be prepared in enough copies so that a form can accompany each portion of the mission (negatives and positives) as it is processed and the operations element can retain a suspense copy. (The mission record can be partially prepared in advance when the operations element receives a copy of the mission request.) Upon completion of these administrative steps, the operations element will route the imagery according to the mission requirements. A set of negatives or diapositives and prints (if requested) will be sent to the II element for interpretation. If reproduction is required, a negative can be sent to the reproduction section so that reproduction can be started as soon as possible. If no reproduction is required, the negative can be sent to the battalion library and reports section for storage. If the requester has asked for imagery, a set of diapositives should be forwarded to him for his own interpretation.

d. Reporting and Close-out. When received by the II element, the imagery will be given to an II for interpretation and preparation of the necessary interpretation reports. Using the pilot trace (FM 30-20) the II will determine the area covered by the imagery and select the appropriate data base overlay that shows previously reported enemy activity or installations in the area. He will also prepare a field plot (TM 30-245) from the pilot's trace, which is a more detailed overlay of the mission area. The II will then interpret the imagery, paying particular attention to the requester's EEI, prepare his draft reports, and update the data base overlay. His draft report will include only those items that constitute changes to the previously reported data base. Negative reports should be submitted. The II's interpretation of the mission will be checked by one of the supervisory personnel, and the draft report will be given to the operations element for transmission to the requester, reproduction of hard copies, and distribution. If at any time during the interpretation the image interpreter notes something of tactical significance to the requester or to any other agency, he will immediately advise the operations element. The latter will then inform the organization concerned as expeditiously as possible. Initial transmission of reports and significant findings from the MIBARS detachment to organizations concerned is normally by telephone if the information is unclassified. For classified information, the most expeditious, secure means is used. After completing the interpretation and reporting require-

ments, the II element will return the negative imagery, together with the pilot's trace and field plot, to the operations element. The operations element will post its status board and mission record and send the imagery, pilot's trace, and field plot to the film library element. The latter will update the detachment master cover trace, prepare a file index card (or make appropriate log entries), and store the mission. The II element's diapositive imagery can be destroyed after the necessary interpretation has been accomplished.

5-23. Reproduction Section

a. General. Although it is a separate organizational entity, the detachment reproduction section is, in effect, in direct support of the operations element of the II section. It receives its requirements from the II section, performs the necessary reproduction, and returns its product to II section operations. In performing its functions, the reproduction section also maintains a mission status board for control purposes and keeps statistical records required for periodic reports. Missions received are scheduled for reproduction according to priority, reproduced as expeditiously as possible, and returned with the annotated mission record to the II section.

b. Portable Darkroom Photographic Facility (ES-38). The major item of equipment in the reproduction section is the Portable Darkroom Photographic Facility (ES-38) (fig. 5-11). There are five in the MIBARS—one per detachment and one at headquarters and headquarters company reproduction section. The ES-38 is mounted on a 2 1/2-ton truck. Power is provided by two 15kw PU-402 generators, which are transported on the section's prime mover 2 1/2-ton truck when the unit is in transit. The ES-38 is normally collocated with the II section's TIF's. A 1000-gallon, 2 1/2-ton tank truck provides the resupply of water for the ES-38, which is fed through a collapsible 1500-gallon, fabric tank. Technical data on the portable darkroom photographic facility is contained in TM 11-6740-282-12.

5-24. Delivery Platoon Elements

Because only one delivery platoon services the entire battalion, it may be divided and portions assigned to support each detachment and the battalion headquarters. In this manner the detachment commanders can schedule delivery runs suited to the requirements in their area, and the battalion S2/S3 can retain operational flexibility

DARK ROOM, PHOTOGRAPHIC, PORTABLE ES-38

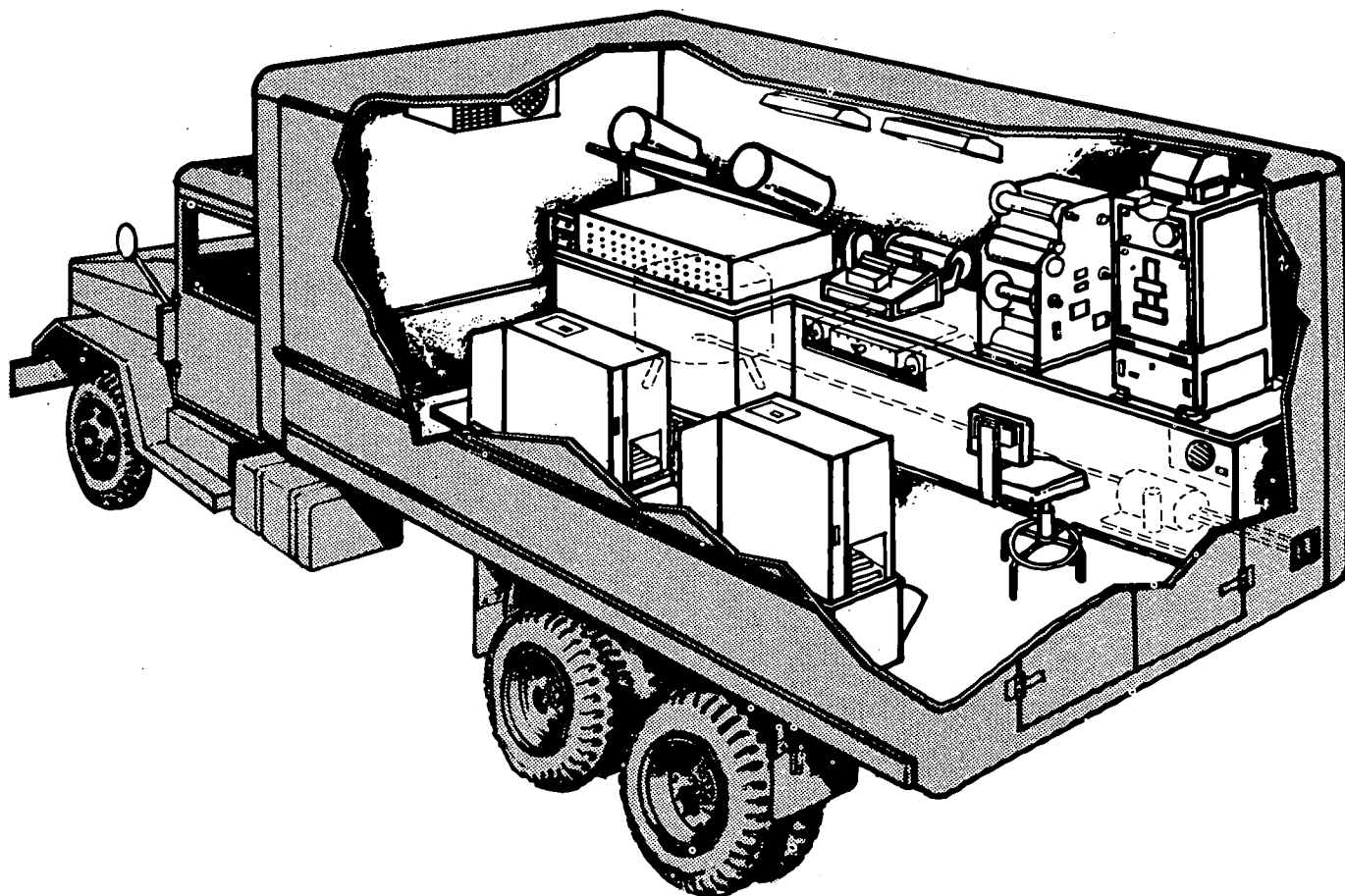


Figure 5-11. Illustration of ES-38.

and meet unusual requirements by a realignment of platoon elements or by using aircraft supporting the headquarters. In their operations, elements of the delivery platoon are required to adhere to Department of the Army standards pertaining to maintenance and flight safety. Their primary mission in support of the detachment consists of delivering imagery and reports to requesting organizations. Administrative requirements related to aerial reconnaissance missions are simple. The primary requirement is a receipt system for the recipient to acknowledge delivery of the shipment. A suggested form is shown in figure 5-12. Items for delivery will be prepared for shipment by the operations element of the II section and either delivered to or picked up by delivery platoon personnel. Classified shipments must be packaged and receipted for in accord-

ance with security regulations in addition to the receipting requirements established by the delivery platoon. The delivery platoon must also establish procedures for the protection or destruction of classified shipments in the event an aircraft is downed in hostile territory. At the detachment level flight scheduling and scheduling the transportation of personnel and materiel will normally be arranged by the operations element of the II section. This is merely an extension of the direct supervision exercised by the battalion operations and intelligence section over the platoon as a whole. Flight records and supervision of the maintenance may be the responsibility of the senior pilot under the supervision of the delivery platoon leader, or the detachment element may be satellited upon, or attached to, an appropriate Army aviation unit.

ACKNOWLEDGEMENT OF RECEIPT

1. The items indicated below have been received:

MISSION NO	MISREP	HOTPHOTOREP	IPIR	PILOT TRACE	OVERLAY	DUP POS	PRINTS	OTHER

2. Date and time received: _____

3. Received by: _____

(Name, title, and organization)

(Signature)

Figure 5-12. Type receipt form.

CHAPTER 6

MIBARS IN STABILITY OPERATIONS

6-1. General

Involvement in stability operations does not change the MIBARS mission, and the overall concept of employment does not differ from that outlined in FM 30-20 and discussed briefly in chapter 4 of this manual. The nature of enemy activity, however, results in a different tenor of operations from that encountered in conventional warfare. Some MIBARS activities receive additional emphasis in stability operations; others become less important. Operations in any insurgency environment also necessitate some adjustments to the training of MIBARS personnel, particularly image interpreters. They must not expect to find obvious indications of the enemy's presence. They must be taught what to look for and how to recognize it when they see it. This chapter discusses the manner in which MIBARS operations in an insurgency environment differ from those in conventional warfare.

6-2. Special Considerations

a. During stability operations the nature of enemy activity will have a pronounced effect on the conduct of MIBARS activities. One of the insurgent's greatest assets is that he is hard to detect and he will endeavor to remain that way. This is particularly true during the early phases of the insurgency. This means that he will put his bases in remote or inaccessible areas, he will rely to an unusual extent upon small-unit and night operations, he will try to maintain a mobility capability greater than that of government forces, and he will try to blend with the populace. He will rely on stealth rather than fire-power. All these factors make the insurgent harder to find and the image interpreter's job more difficult. Instead of looking for extensive fortifications, logistical depots, or airfields, the image interpreter must search for individual foxholes, isolated artillery or antiaircraft emplacements, evidences of activity on trails and waterways, evidence of farming where there should be no farmers, and other natural inconsistencies. For such indications of enemy activity to be detected,

it is necessary that the imagery be of larger scale than is normally required, and the interpreter must be particularly painstaking and thorough in his work.

b. Specifically, enemy activity will be noted from direct evidence and inferred from indirect evidence. Direct evidence, such as imagery showing enemy fortifications, base camps, troop movements, or the movement of supplies, will be the exception rather than the rule. Therefore, the image interpreter must learn to recognize indirect evidence that can lead to reasonable conclusions concerning enemy activities. Indications of human activity (fishing, farming, the appearance of trails, etc.) in areas thought to be deserted are examples of typical indirect evidence. Other examples might be the sudden and unexplained abandonment of a village, abnormal traffic patterns, and the appearance of agricultural and construction techniques foreign to the culture of the immediate area. To detect these indications and to understand their import, the image interpreter must be an expert on the area concerned. He must be thoroughly familiar with the terrain and with the normal cultural, social, and economic patterns of its inhabitants. He must be unusually alert to note discrepancies, and when his suspicions are aroused he must be able to refer to previous imagery for purposes for comparison. To increase the probability of detecting what indirect evidence there is, the interpreter should have access to intelligence from other sources. This will alert him as to where to look and what to look for. This means that the MIBARS must be closely associated with other intelligence agencies. The reports prepared by the MIBARS will in most cases provide only a sketchy basis for action. The user must collate these reports with intelligence reports from other sources to determine the pattern of enemy activity. The unusually close association and cooperation between all members of the intelligence structure is an essential aspect of stability operations.

6-3. Operations Modifications

a. The factors discussed above generally result in some modification of the operational procedures outlined in chapter 5. The first and most apparent departure from the norm may well involve the deployment of the MIBARS itself. Inasmuch as stability operations will usually occur in relatively undeveloped countries, the availability of suitable airfields may affect the disposition of Air Force reconnaissance units. In turn, this will affect the deployment and operations of the MIBARS detachments, the delivery platoon, and the ARLO section. Each case will be unique. The MIBARS commander and staff must be able to adjust to the demands of the situation and to modify their procedures in whatever manner required to insure complete and timely support of tactical units.

b. In stability operations, emphasis will be placed upon aerial surveillance as opposed to reconnaissance. Direct evidence of the enemy, giving rise to the need for reconnaissance of a specific target, is rather unusual. The need to locate him through indirect evidence necessitates repeated day-and-night, aerial surveillance covering large areas. The amount of imagery to be processed will be very great, possibly requiring augmentation of various MIBARS elements. The film libraries will also be larger than normal due

to increases in imagery being processed and the requirement to retain imagery for comparative study.

c. The nature of enemy activity, with the attendant requirement for detailed studies, places more emphasis on detailed imagery interpretation reports. As in conventional warfare operations, there is always the need for hot photo reports, mission reports, and immediate reports. In stability operations, however, the supplemental photo interpretation report (SUPIR) (para 5-7f.) takes on added significance. The SUPIR is of great value to intelligence analysts in determining the enemy's activity patterns. The MIBARS can expect greater use of SUPIR's during stability operations and should train the image interpreters in their preparation.

d. From the foregoing it can be seen that stability operations may call for procedural modifications varying from relatively minor shifts in emphasis to an almost complete abandonment of the normal concept of employment. As the operations continue, there will almost certainly be departures from procedures adopted at the outset. Stability operations require the utmost of the MIBARS in terms of flexibility, initiative, and inventiveness in its response to the requirements of the mission.

CHAPTER 7

INTERNATIONAL AGREEMENTS

7-1. General

The forms and procedures discussed in chapter 5 are applicable for most MIBARS operations. Under certain circumstances, however, modifications will be required so that the MIBARS can comply with the provisions of international agreements or directives from higher headquarters. Most modifications involve changes to requesting and reporting formats rather than procedural changes and should not cause any difficulty provided the MIBARS commander and staff are aware of the requirement and have the necessary reference documents. This chapter discusses briefly the contents of these documents and describes the nature of the requirements they generate.

7-2. International Agreements

a. In chapter 1, reference is made to certain international agreements to which the United States is a party. The purpose of these agreements, made between the United States and friendly nations in various parts of the world, is to standardize the procedures, forms, and equipment employed by forces which may be operating together. Current agreements of concern to the MIBARS are of two types. The most numerous are the standardization agreements made with the North Atlantic Treaty Organization (NATO), the Central Treaty Organization (CENTO), and Southeast Asia Treaty Organization (SEATO) nations. NATO and CENTO agreements are called Standardization Agreements (STANAG); SEATO agreements are called SEATO Standardization Agreements (SEASTAG). Although not all the members of any treaty organization have ratified all the agreements, the agreements themselves, by number and content, are the same for each organization. Thus, NATO STANAG 3277 (Air Reconnaissance Request Form), CENTO STANAG 3277, and SEASTAG 3277 are for all practical purposes identical.

b. The second type of agreements involves

Australia, Canada, Great Britain, New Zealand, and the United States. These agreements are drafted by the Air Standardization Coordinating Committee (ASCC), representing the nations involved, and are called ASCC Air Standards. Although the ASCC Air Standards employ a different numbering system, their contents are almost identical to STANAG and SEASTAG dealing with the same subject.

c. The MIBARS, when part of an international force, must be prepared to comply with appropriate agreements. A list of such agreements currently in effect is shown in figure 7-1. Most of these will be discussed in paragraph 7-4.

7-3. Other Directives

The Joint Chiefs of Staff and the Defense Intelligence Agency have also published directives which require MIBARS compliance. In processing missions of interest to the Joint Chiefs of Staff, the MIBARS should be prepared to follow the provisions of JCS Pub 12, and adherence to appropriate DIA publications is required when responding to requests from that agency. US members of standardization groups are attempting to bring JCS directives pertaining to aerial reconnaissance and surveillance procedures into consonance with international standards.

7-4. Particular Requirements

a. International Agreements.

(1) *STANAG 2019 (Military Symbols)*. This agreement standardizes the military symbols to be used by the NATO Armed Forces.

(2) *STANAG 2029 (Method of Describing Ground Locations, Areas and Boundaries)*. This agreement details the manner in which place names, map references, areas, riverbanks, and positions will be used in orders, instructions, and reports. A proposed addition describes a reference point system for specifying ground locations. The provisions of this agreement would be applicable to II reports prepared by the MIBARS.

INTERNATIONAL AGREEMENTS

	NATO STANAG	CENTO STANAG	SEATO STANAG	ASCC AIR STDS
• Military Symbols	2019 (2d Ed)	2019	2019	
• Method of Describing Ground Locations, Areas, and Boundaries	2029 (3d Ed)	2029	2029	
• NATO High Contrast Developer	3182 (3d Ed)			52/5A
• Titling of Air Reconnaissance and Air Survey and Mapping Photography	3189 (3d Ed)	3189 (2d Ed)	3189	
• Point Designation Template for Air Photography	3205		3205	
• Air Reconnaissance Request Form	3277 (4th Ed)	3277	3277	101/3
• Air Reconnaissance Intelligence Report Forms	3377 (2d Ed)	3377	3377	
• Air Reconnaissance Intelligence Reporting- Nomenclature of Equipment and Installations	3483			
• Air Reconnaissance Target Reporting Guide	3596			
• Focal Lengths for lenses for Air Reconnaissance and Mapping Cameras				52/4
• Titling and Exchange of Hand-held Photography				101/4

Figure 7-1. International agreements.

(3) *STANAG 3182 (NATO High Contrast Developer)*. This agreement prescribes the formula for the developer, and the ratifying nations agree to have this developer available for use.

(4) *STANAG 3189 (Titling of Air Reconnaissance and Air Survey and Mapping Photography)*. This agreement details the system to be used in titling aerial photography. ASCC Air Standard 101/2B deals with the same subject and is identical to this STANAG with the exception that the altitude is given in feet only, whereas under the STANAG it may be given in feet or meters.

(5) *STANAG 3205 (Point Designation Template for Air Photography)*. This agreement describes, and tells how to use, a transparent point

designation template. Participants agree to use this template in identifying points on aerial photographs. The template is not the same as the point designation grid normally used by US Forces.

(6) *STANAG 3277 (Air Reconnaissance Request Form)*. This agreement describes the form used for requesting aerial reconnaissance. The form is basically the same as that shown in figures 5-2 and 5-3.

(7) *STANAG 3377 (Air Reconnaissance Report Forms)*. This agreement gives the purpose and prescribes the format and content of the Mission Report, the HOTPHOTOREP, the Immediate Photo Interpretation Report (IPIR), and the Supplemental Photo Interpretation Re-

port (SUPIR). This agreement also includes detailed instructions for preparing the latter two reports on IBM punch cards for data processing or AUTODIN transmission.

(8) *STANAG 3596 (Air Reconnaissance Target Reporting Guide)*. This agreement establishes target categories and information required in aerial reconnaissance intelligence reports which are intended for dissemination to other NATO nations. The local interpreter of any nation can thus precisely determine the category and the data which should be included in the report.

(9) *ASCC Air Standard 101/4A (Titling and Exchange of Hand-Held Photography)*. This agreement establishes standards concerning the titling and processing of hand-held photography exchanged between participants.

b. Other Publications.

(1) *JCS Pub 12 (Tactical Command and Control Procedures for Joint Operations)*. This

publication has a section dealing with joint tactical air reconnaissance/surveillance operations. Included are the prescribed requesting and reporting formats, a briefing form, and a list of target categories and EEL.

(2) *DIAM 57-5 (Aerial Photography and Airborne Electronic Sensor Imagery (Forwarding, Titling, and Plotting))*. This manual contains detailed instructions concerning forwarding and titling imagery and plotting mission cover traces. The instructions pertaining to titling are very similar to those shown in STANAG 3189.

(3) *Other DIA Publications*. The Defense Intelligence Agency has issued other directives pertaining to the processing of imagery secured in support of national objectives. When the MI-BARS is involved in the handling of such imagery these documents must be referred to for instructions concerning the preparation and submission of reports and imagery.



CHAPTER 8

TRAINING

8-1. Purpose and Scope

This chapter discusses training techniques unique to the MIBARS, and recommends training devices the battalion and detachment commanders can use to increase the overall efficiency of their units and the professional skill of their personnel. This chapter will not discuss training required under Army Training Program (ATP) 30-5 (*Military Intelligence Units*) or training received in the MOS-producing courses at the various service schools.

8-2. General

Because all officers and most all enlisted personnel will have satisfactorily completed an MOS-producing course prior to assignment to MIBARS, this chapter will deal only with training the MIBARS as a unit. (ATP 30-5 lists those enlisted specialties that may be unit trained.) This training can be broken into the CONUS phase and the post-deployment phase.

8-3. CONUS Training

a. The MIBARS should engage in exercises and maneuvers that will require support operations progressing from section through battalion. MIBARS operations usually involve the continuous coordination of the efforts of separate sections, some widely dispersed. The capability to perform the mission effectively on a 24-hour basis can only be developed through constant practice under varying conditions. Through this practice, procedures adaptable to all conditions can be developed.

b. A flexible approach toward methods of mission accomplishment should be developed. Because of the nature of the product, the quantity of output, and the need for rapid yet accurate response, various control and supervisory devices must be employed to insure that the job is completed properly and on time. However, supervisory personnel must resist the tendency to over-control and to subordinate mission accomplishment by blind adherence to SOP. Also to be avoided is the possibility that the proper comple-

tion of control devices (status board, log sheets, receipt forms, etc.) will become an end in itself rather than a means to the end. If either of these tendencies becomes pronounced, the unit will be unable to respond to anything but routine requests received under "normal" conditions. It will completely lose its flexibility. When this happens, the SOP, the supervisory personnel, or both, should be changed.

8-4. Post-Deployment Training

a. When the MIBARS is deployed to an area of operations it should be able to work as a unit to perform its mission. After deployment, the main problem for the MIBARS will be to adjust to its new environment and existing conditions. If flexibility has been stressed during the CONUS training, this adjustment should not be too difficult for that unit. However, individuals will require training to recognize the peculiarities of the new environment. Part of the training will be formal and conducted at battalion level; part will be informal and conducted at section or detachment level.

(1) The informal training will consist primarily of familiarizing personnel with the operational area. The delivery platoon must establish flights to familiarize pilots with the weather, the terrain, and airfields in the area. To assist them in their duties, ARLO and II personnel should participate in flights when the delivery platoon to learn the appearance of the terrain from the air. II keys and imagery training packets should be developed to further increase the expertise of the interpreters. Personnel of all sections should be trained on special equipment and in operational or maintenance techniques required by the particular environmental conditions.

(2) Formal orientation courses will normally be established to train MIBARS personnel and personnel of other units. Training for MIBARS personnel is generally of two types first, acquainting personnel with the peculiarities of the area, and second, training on new items of equipment that will be introduced periodically.

b. The informal training applies primarily to II and ARLO personnel and would include instruction on the friendly organization, types of aircraft and sensor systems employed, imagery formats, and instruction on detection and recognition of enemy activity. The course should emphasize the friendly intelligence structure and inform the II and ARLO of other intelligence support available to them. Finally, the course should include information concerning the enemy order of battle, tactics, equipment, and installations. Instruction on new equipment can be presented to the users at a central location, or an instructional team can be organized and dispatched as required.

c. MIBARS personnel and G2 Air personnel must work closely together at various levels of command. This working relationship is greatly enhanced if G2 Air personnel are also trained image interpreters, but if not, it would be advantageous to give them appropriate training. Typical subjects would include MIBARS functions, the aerial reconnaissance support system, G2 Air functions, and special operational support available. A tour of support facilities operated by the MIBARS and other agencies should also be provided. This training would be invaluable to the G2 Air in performing his job, enabling the MIBARS to explain its services, and would establish a close working relationship and rapport.

APPENDIX

REFERENCES

1. Army Regulations (AR)

- 95-1 Army Aviation—General Provisions.
- 310-25 Dictionary of United States Army Terms (Short Title: AD).
- 310-50 Authorized Abbreviations and Brevity Codes.
- 380-5 Safeguarding Defense Information.
- 380-6 Automatic, Time-Phased Downgrading and Declassification System.
- (C)330-7 Security Classification of Airborne Sensor Imagery.
- 380-21 Security Classification Concerning Airborne Passive Scanning Infrared Imaging Systems.
- 380-23 Security Classification Policy of Imagery Obtained by Airborne Passive Scanning Infrared Imaging Systems.
- 750-1 Maintenance Concepts.

2. Field Manuals (FM)

- 1-80 Aerial Observer Techniques and Procedures.
- 1-100 Army Aviation Utilization.
- 24-1 Tactical Communications Doctrine.
- 30-5 Combat Intelligence.
- 30-9 Military Intelligence Battalion, Field Army.
- 30-10 Terrain Intelligence.
- 30-20 Aerial Surveillance-Reconnaissance, Field Army.
- 31-23 Stability Operations—US Army Doctrine.
- (C)32-5 Signal Security (SIGSEC) (U).
- 100-5 Operations of Army Forces in the Field.
- 100-26 The Air-Ground Operations System.
- 101-5 Staff Officers Field Manual: Staff Organization and Procedure.
- 101-10-1 Staff Officers Field Manual: Organizational, Technical, and Logistical Data (Unclassified Data).

3. Technical Manuals (TM)

- 11-5895-431-12 Organizational Maintenance Manual: Tactical Imagery Interpretation Facility AN/TSQ-43.
- 11-5895-460-12 Operator and Organizational Maintenance Manual: Console, Viewer-Computer, Imagery Interpretation AR-85A.
- 11-6740-282-12 Operator and Organizational Maintenance Manual: Photographic Darkroom Group ES-38B.
- 30-245 Image Interpretation Handbook—Volume I and Volume II.
- 30-304 Image Interpretation Equipment Catalog.

4. Department of the Army Pamphlets (Pam)

- 310-1 Index of Administrative Publications.
- 310-2 Index of Blank Forms.
- 310-3 Index of Doctrinal, Training, and Organizational Publications.
- 310-4 Index of Technical Manuals, Technical Bulletins, Supply Manuals (Types 7, 8, and 9), Supply Bulletins, and Lubrication Orders.
- 750-1 Preventative Maintenance Guide for Commanders.

5. Tables of Organization and Equipment (TOE)

- 30-5G Military Intelligence Battalion, Aerial Reconnaissance Support, Field Army.
(Updated)
- 30-6G Headquarters and Headquarters Company, Military Intelligence Battalion, Aerial
(Updated) Reconnaissance Support, Field Army.
- 30-7G Military Intelligence Detachment, Aerial Reconnaissance Support, Field Army.
(Updated)
- 30-14 Military Intelligence Detachment, Armored Cavalry Regiment or Military Intelli-
gence Detachment, Separate Infantry Brigade.
- 30-17H Military Intelligence Company, Infantry Division or Military Intelligence Company,
Infantry Division (Mechanized) or Military Intelligence Company, Airborne Di-
vision or Military Intelligence Company, Airmobile Division.
- 30-18H Military Intelligence Company, Corps or Military Intelligence Company, Airborne
Corps.
- 30-25 Military Intelligence Battalion, Field Army.

6. Joint Chiefs of Staff Publications (JCS Pub)

- 1 Dictionary of United States Military Terms for Joint Usage (Short Title: AD).
- 12 Tactical Command and Control Procedures for Joint Operations.

7. Defense Intelligence Acquisition Manual (DIAM)

- 55-5 Aerial Photography and Airborne Electronic Sensor Imagery (Forwarding, Titling,
and Plotting).
- (C) 55-6 Intelligence Photographic Services (U).
- (S) 57-5 DOD Exploitation of Multi-Sensor Imagery (U).

8. US Continental Army Command Regulations (CONARC)

- 350-1 Training—CONARC Training Directive.

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By Order of the Secretary of the Army:

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